

ATHLETIC JOURNAL

Vol. XX, No. 3

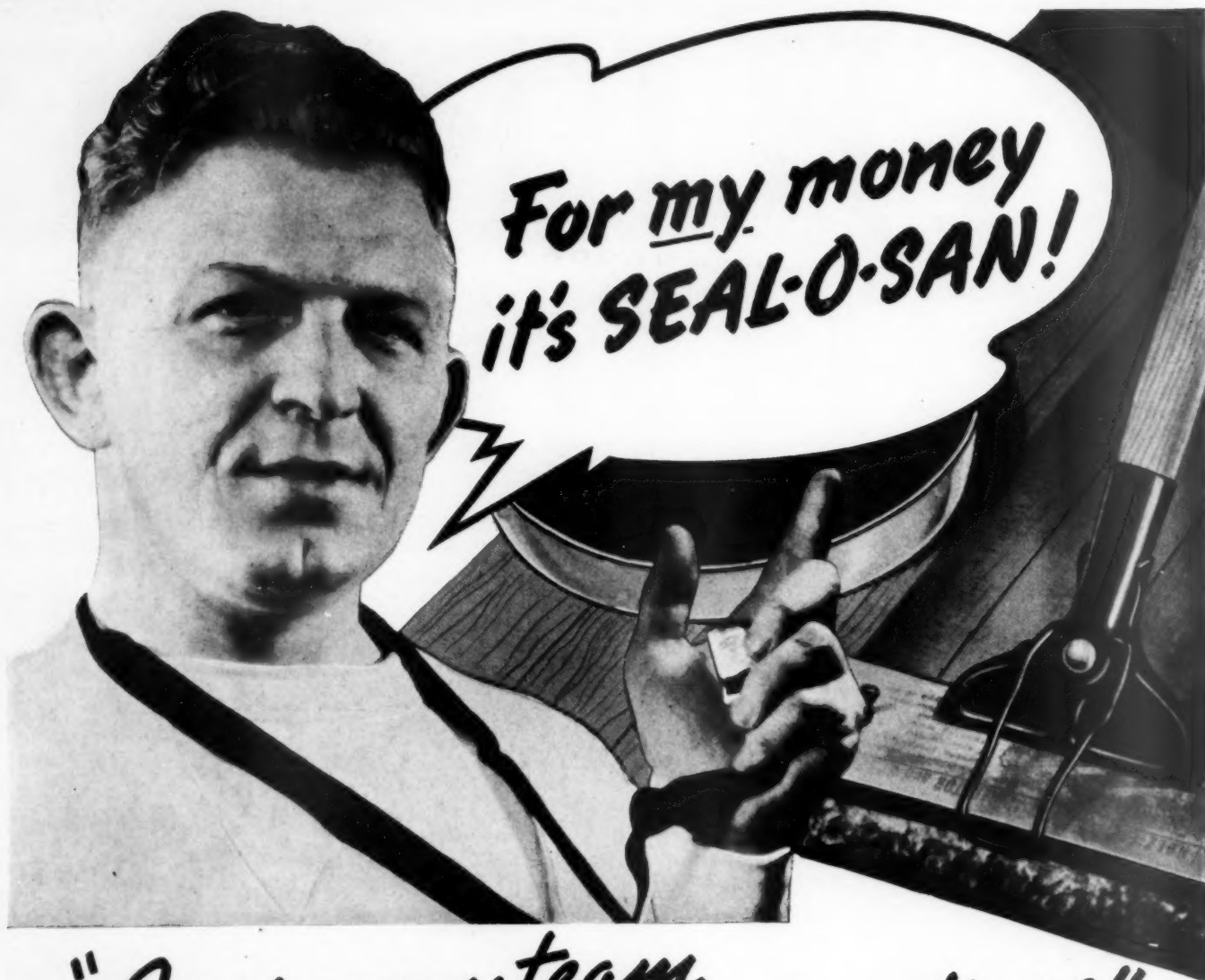
November, 1939



Some Offensive and Defensive
Football Systems—Their
Strength and Weakness

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the Colleges

Football Offense of 1939 in
the High Schools



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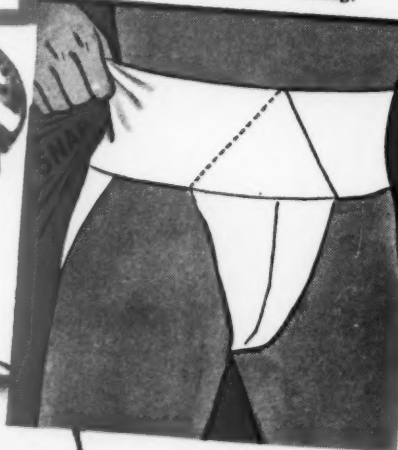
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PUBLISHED MONTHLY except July and August by the Athletic Journal Publishing Company, 6858 Glenwood Avenue, Chicago, Illinois, Member Audit Bureau of Circulations. Request for change of address must reach us thirty days before the date of issue with which it is to take effect. Duplicate copies cannot be sent to replace those undelivered through failure to send advance notice.



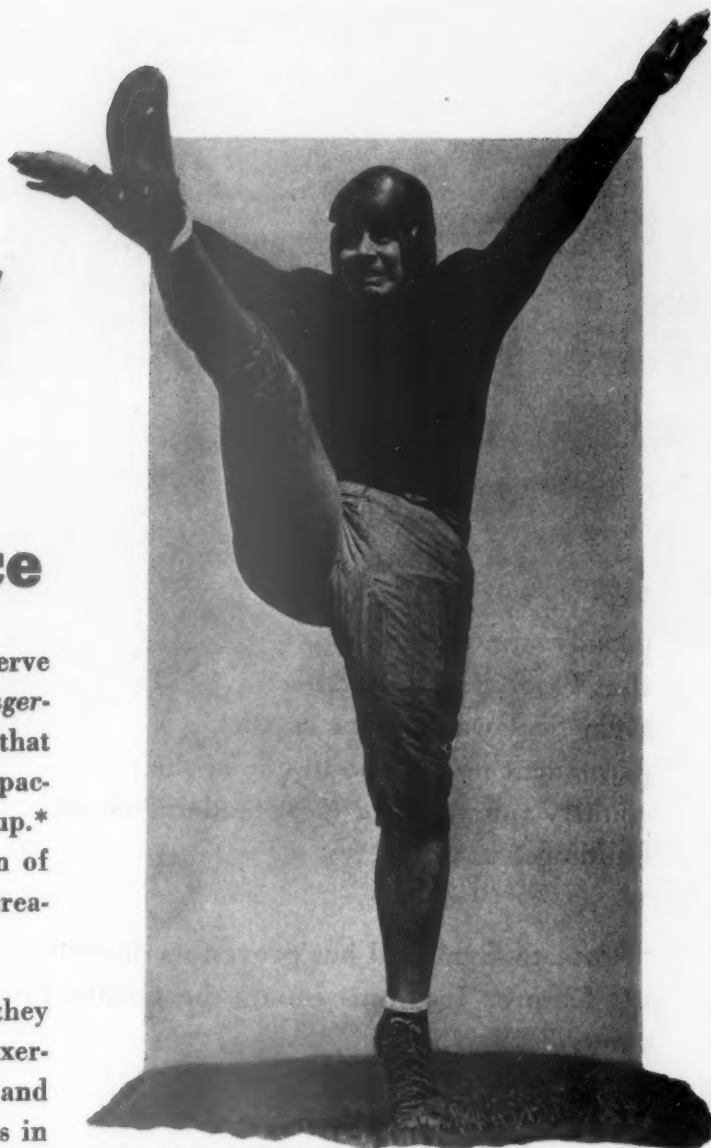
SUBSCRIPTION PRICES: \$1.50 per year; \$2.00 for two years; \$2.50 for three years; 90 cents for six months; 75 cents for five months; Canada, \$1.75 per year; foreign, \$2.00 per year. Single copies, 25 cents. Copyright, 1939, The Athletic Journal Publishing Company. Entered as second-class matter, August 14, 1925, at the post office at Chicago, Illinois, under the Act of March 3, 1879.

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1 "Proceedings of the Society for Experimental Biology and Medicine," 40:157, 1939.

2 Best & Taylor — "Physiological Basis of Medical Practice," 1937.

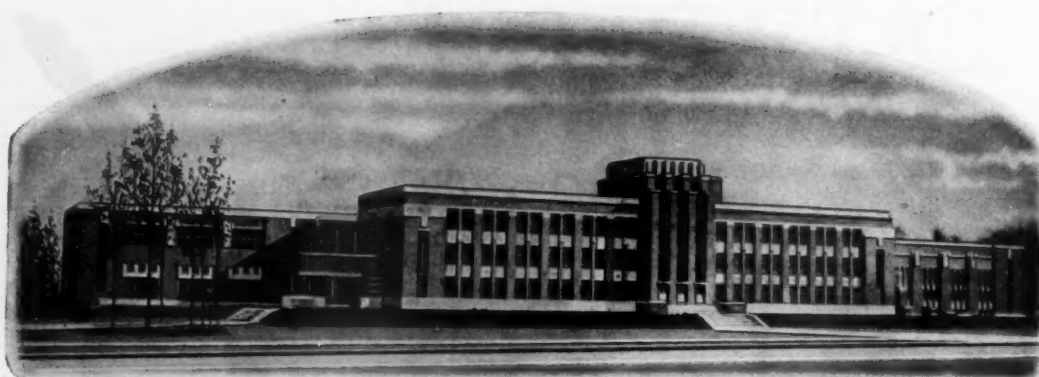
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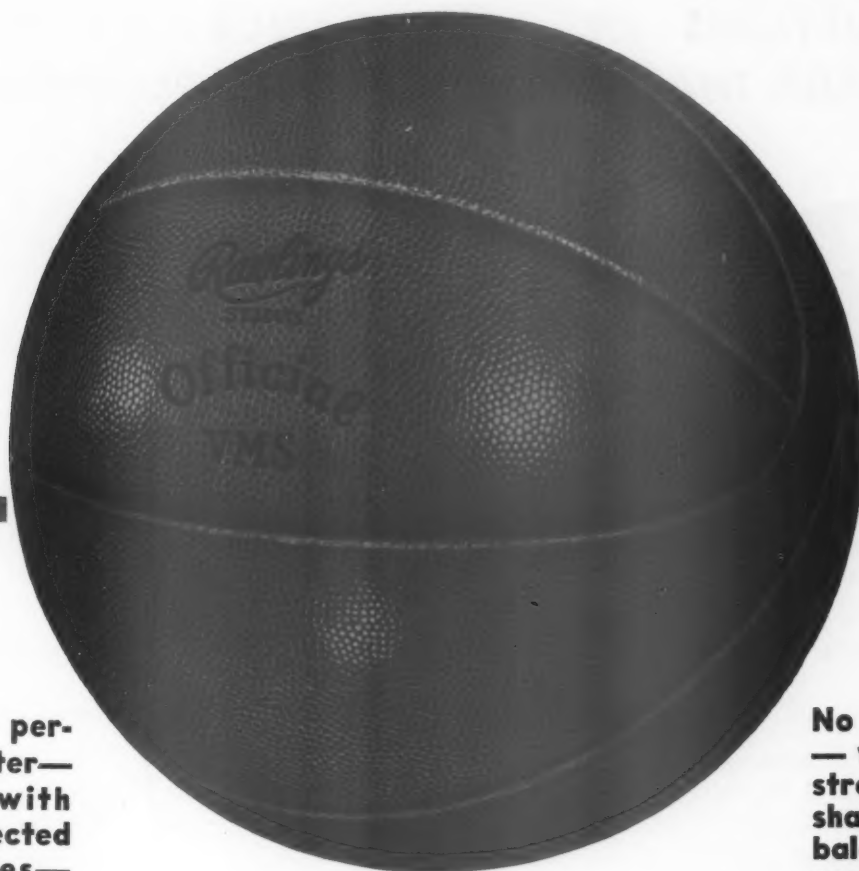
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Some Offensive and Defensive

Football Systems

By Glenn Holmes

High School, Oak Park, Illinois
and

Raleigh Holt

High School, Trinidad, Colorado



General Aspects of the Systems

By Glenn Holmes

THERE is such a variety of offensive formations and so many variations of each that I shall try to cover only a few of the most popular ones. It is understood, of course, that the formation that a coach selects as his basic one should be determined by: (a) the material he has to work with, (b) the type of offense he desires to play, and (c) his previous knowledge of the formation. I believe that most coaches adapt their material to the formation, rather than adapting the formation to the material. The reverse of that would be better, but it is hard to teach one formation one year and change another year to an entirely different formation that requires different timing, different blocking, and different fundamental play throughout the entire offense.

The Notre Dame or Balanced Box Formation is a speed formation. It requires fast backs, as well as fast linemen. It lends itself well to deception, due to the balanced line and to the position of the backs. It has good short-side strength because of the position of the backs and because the line is balanced. It is not such a good power formation, due to the fact that there is very little concentration of strength in the line or back field. It is a fair formation for passing, and fair for quick-kicking.

The Single Wing-Back Formation is primarily a power formation. It is not particularly fast in getting to the point of attack. It is powerful because strong offensive men can be concentrated for an attack at a certain point in the defense. It is strong to the strong side, with fairly good short-side possibilities. It is a good passing formation, and offers fair quick-



(Upper left)—Leaping in the air, right-end Kelley of the Cornell squad, takes a pass from McCullough to make a gain of eleven yards in the Cornell-Syracuse game.

(Center)—Les Stanczyk (36) Columbia left halfback making a gain in the Yale-Columbia game.

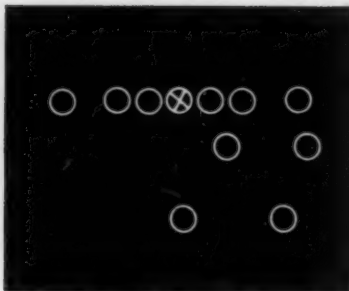
(Lower left)—Trojan quarterback Grenville Lansdell (78) about to be tackled by University of Oregon player after a long end run.

(Lower right)—James Strausbaugh, Ohio State left halfback about to be tackled by Joe Mernik in the Minnesota-Ohio State game.

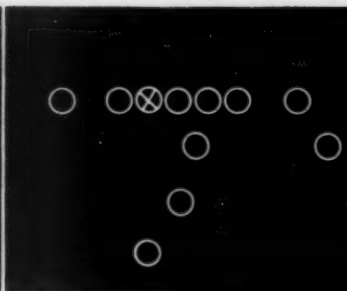
kicking possibilities and deceptive arrangements.

The Double Wing-Back is an excellent formation when good linemen are available. It requires a good fullback and fast halfbacks. It lends itself to fine deceptive

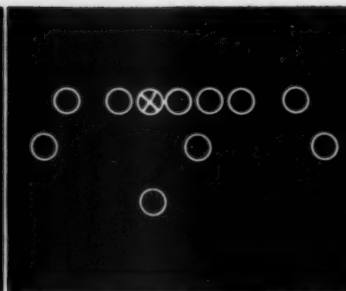
plays, which are somewhat slow in hitting the point of attack. It is a strong passing and reverse formation. Possibility of lateral passes is good. There is a lack of strength in concentrating for any particular attack on the defense. The weakness



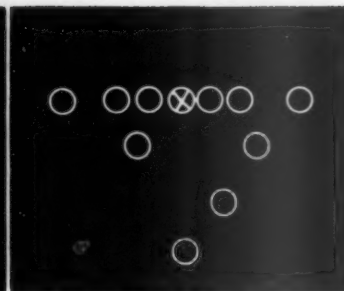
Notre Dame Box Formation



Single Wing-Back



Double Wing-Back



Short-Punt Formation

of it is that it is slow to hit the point of attack, and that it lacks power at any particular point.

The Short-Punt Formation is a very versatile one. It offers fine deceptive possibilities, is excellent for plays straight ahead and inside of tackle. It is excellent for quick-kicking, and it is a good passing formation. Its weakness is that it has very little strength outside of tackle or end.

Defensive Formations

Almost every team at the present time has two or more defensive formations that are employed during every game. A great many teams have as many as four or five. Schools that do scouting are tending to change their defensive formations weekly. The strength of any defense, of course, lies in a team's ability to vary the positions of its linemen and backs so as to match the strength of the opponent's offense.

The 7-1-2-1 formation is excellent for an all-around defense. It has strength in the line, and it is not so weak on passing as might appear, due to the fact that there are seven men to rush the passer. It offers more possibilities than any other defensive formation by playing men out of their orthodox positions. Its weakness is on running plays, when the ball-carrier is allowed to get through the line, in that there is only one backer-up.

The 6-2-2-1 is a very versatile defense, amounting really to an eight-man line. It is strong against most types of offense. It is good against passing, lateral passes, and a running offense. It is weak against plays down the center, both through the line and in the secondary.

The 5-3-2-1 formation is not so weak on running plays as it appears on paper. It is strong against forward passes, except that it lacks rushers to hurry the passer. It is especially strong against lateral and short passes. It is good against running plays if the backers-up are strong.

The 6-3-2 formation is especially strong against running plays of all types. It really amounts to a nine-man line. Its weakness, of course, is against long passes and quick kicks. If pass receivers can be covered, it is one of the best defenses against all types of offense.

ALTHOUGH many articles on the various systems of offense and defense have appeared in this publication since its founding nineteen years ago, several requests have come in recently for a discussion of the systems of offense and defense—their strength and weaknesses. These requests came from high school coaches who asked that the articles be written by high school coaches. The two coaches, Glenn Holmes and Raleigh Holt, who have written the articles in this issue are, we believe, well qualified to discuss the subject. Both men have enviable coaching records and are students of the game.

Several Systems Discussed—the Notre Dame in Particular

By Raleigh Holt

THE three most popular systems of football offense in use today are: the Notre Dame, Warner, and the Short-Punt. Reports from the different conferences, and the interscholastic leagues, indicate that the Warner system is probably the most universally used today. Due to the fact that the writer has used the Notre Dame system for many years this offensive plan is more fully discussed than the others. An effort has been made to point out the strength and weaknesses of these offensive systems, as well as several of the popular defensive plans in use throughout the country today.

All of the systems mentioned above have been tried out in the ranks of high school football players and have been found to be practicable. Regardless of the system under which the high school coach has played, or which he prefers, he must select the system that seems to fit his material at hand. This is usually one of the hardest problems confronting the average coach who has to work with boys of high school age. The Notre Dame system requires material that is fast and clever. It stresses excellent individual blocking. The left halfback must have triple-threat ability. The Warner system requires big, hard-driving, powerful backs.

Speed is not as essential in this system as it is with the Notre Dame offense. The Short-Punt system requires a triple-threat back in the tail-back position. The ends and all of the backs must be excellent pass-receivers.

THE NOTRE DAME OFFENSE

As a general rule this system depends upon control of the ball for its success. The slogan of the coaches using this type of offense is, "When you have the ball the other fellow cannot score." Every play is so designed that every defensive player is supposed to be blocked with the exception of two linemen on the opposite side of the play. This type of play will result in long runs when the offensive blockers fulfill their assignments. The individual blocking, that is so necessary in this system, results in placing more men in the interference. Consequently this puts more of a burden upon the defense.

Strong Points of the Notre Dame System

The balanced line is preferred by Notre Dame coaches because it gives strength to both sides. It increases the strength of the weak-side plays. The distance that the guards have to travel in the interference is less than that in the unbalanced line. The same guards can very easily run to both sides. The guards are in an ideal position to be brought back for protection to the passer.

Short side plays strong. Many teams try to stop the Notre Dame offense by over-shifting. The balanced line enables the offense to come back to the weak side almost as well as to the strong side. As a result the over-shifted defense has not been successful against this offensive system. Good deception, such as reverse spinner plays back to the weak side, has made this type of play almost as powerful as the strong-side attack.

The Notre Dame system is based on outside play. This is true of all good offensive systems. The attack is centered around the defensive tackles. This is true of both the strong-side and the weak-side play.

The split line. The split line, in which the ends are split away from their tackles about a yard and a half after the shift, tends to spread the defense. The defensive tackles will have to line up just outside



The 7-1-2-1



The 6-2-2-1



The 5-3-2-1



The 6-3-2

the offensive ends' shoulders. This will cause the defensive guards to shift wider and to protect their tackles. As a result there is a considerable spread in the defensive line which creates holes that are hard to fill up. If the defensive team shifts into a 7-1-2-1, or 7-2-2 defense then the passing attack will have better success. The split line also gives the offensive ends a better opportunity to break away to receive passes. Cross charging and mousetrapping can be used successfully.

Plays have power and speed. The plays are run with great power and speed. Deception is the main factor of the offense. The system demands excellent blocking by both the linemen and the backs. The result is that good interference is a feature of the play. This is built upon the knowledge of how to properly block a defensive man in a fast running play. The plays are so designed that several of them, starting alike, develop into different endings. These plays are used in cycles. The flank attack is very good to the strong side. The guards are able to get into the interference quickly because of the balanced line.

Forward passing. Forward pass plays are strong from this formation because of the three quick receivers. There is also excellent protection for the passer. Some Notre Dame coaches place their wing-back inside the strong-side end, others place him outside the end, and still others place him directly behind the end. The position depends entirely upon the material available. Much depends upon the blocking ability of the back whether or not he has speed and ability to catch a pass.

Deception. The location of the backs makes this system ideal for deception. The shift also adds to the deception, and is used only for that purpose. As a general rule the defense is not quick enough to catch the exact placement of the backs after the shift has been completed. These backs might be in a Z-formation, a box formation, a V-formation, or a short-punt formation.

Quick-kick. This formation lends itself to an ideal quick-kick situation. The backs are so placed that the punter, in the fullback position, has excellent protection. The balanced line aids in the protection of the kicker.

Weak Points of the Notre Dame System

Individual blocking. Individual blocking is probably the most important weakness in this system. The offensive ends must be able to handle the defensive tackles alone. The backs must be able to handle their blocking assignments by themselves. This requires a great amount of individual instruction, attention and time on the part of the coaches. Many of them do not have the time, or are not willing to put in that much time on blocking.

In reality the Notre Dame system does have double-teaming on the defensive tackles. For instance, on the off-tackle play to the strong side, the end blocks the tackle. If the end cannot handle him alone then the strong-side guard will help out. The quarterback will then change and block the line-backer. The fullback will help the wing-back on the defensive end when needed.

Burden on the center. If the two guards are used in the interference there will be an added burden on the center. He will have to pass the ball and then fill the hole left by the guard pulling out. This is hard to do and many centers cannot handle that double assignment. In that case the only thing to do is not to pull the guard out. On line smashes directed at the center of the line, the center must be able to help open a hole.

Good blocking ends. The ends must be excellent blockers and good pass-receivers. Many ends are not able to block well enough to handle the defensive tackles alone. In that case the running guard will have to help out.

Good passer necessary. This system demands a good forward passer. The left halfback should be able to carry the ball, pass, punt, and block. He must be able to shoot long as well as short passes.

THE SHORT-PUNT OFFENSE

This plan of attack is now being used by many Notre Dame coaches. Their teams are shifting into this formation from the old regular T-formation. To be successful the material at hand must include a tail-back with triple-threat ability, and plenty of speed. All of the pass-receivers must be good at faking and catching passes as this type of play is the basis of this particular formation.

Strong Points of the Short Punt Offense

Punting and the quick kick. This formation is very good for punting and the quick kick due to the placing of the backs. The ends are split away far enough to enable them to get into the secondary with plenty of speed.

Strong attack to both the strong and weak sides. Due to the fact that the line is balanced, and one back is stationed on the left side of the center, this formation is ideal for strong plays to the weak side. The guards leading the interference are able to get out quickly and form ahead of the ball-carrier.

Deception strong. The location of the backs makes this formation a good one for deception. Spinners, reverses, and fake reverses work nicely into the offensive plays.

Strong for forward passes. The passer is far enough back so that he has plenty of time to look over his field and choose his receivers. The ends are far enough out from the defensive tackles that they can break quickly into the secondary. The guards are so placed that they can come back easily to protect. The receiving backs can break quickly into the secondary for passes.

Lateral passing strong. This formation is a good one for all types of laterals and forward laterals.

Weak Points of the Short-Punt Offense

Line bucks. This formation is not good for line bucks because of the distance that the backs are from the scrimmage line. The linemen cannot hold the holes open long enough.

Flank attacks weak. These types of plays are not so strong as in other formations due to the distance of the backs from the scrimmage line. The defensive players have too much time with which to meet the offensive thrusts.

Too much emphasis on passing. This formation is such a good one for passing that most of the coaches will stress that phase of the offense to the detriment of the running attack. The offensive balance will not be good. Consequently the defense will concentrate on that offensive phase and will have a better chance to stop the passes.

(Continued on page 47)



Planning the Players' Manual for Coaching Basketball Fundamentals

By Louis Lerda and Gilbert Cooper
High School, Coatesville, Pennsylvania

BELIEVING that a boy, who is interested enough in basketball to hope to become a member of a Varsity team, should know the fundamentals until he can execute each perfectly without thinking about them, we prepare a manual of fundamentals which is given to each boy to serve as a text book.

This manual is made up in mimeograph form. We take the best illustrations that we can get and have them drawn up in outline form. The accompanying sketches together with the explanatory material on Stops and Starts—Pivots and Turns—one chapter from the manual will give an idea of how the material is assembled.

The manual takes up the following subjects: Handling the Ball; Types of Passes—the push pass, the two-hand underhand pass, one-hand underhand pass, bounce pass, hook pass (running), hook pass (standing); Goal Shooting—the technique and suggestions for improving goal shooting; Foul Shooting; The Dribble; Stops and Starts—Pivots and Turns, the front turn, the reverse or back turn; Individual Defense and Basketball Strategy. Each chapter is illustrated with outline drawings as in the lesson on Stops and Turns—the front turn and the reverse or back turn as shown below. (See drawings on opposite page.)

Specific Suggestions to the Player from the Chapter on Pivots and Turns

It is assumed that every boy who studies this manual has hopes of some day becoming a member of a regularly organized team—a Varsity. You can never be a good basketball player or become a star if you do not develop clever body and foot movements. Quick starts and stops, pivots and turns are necessary to help you protect the ball from your opponents and

to help you lose your man when he is guarding you closely.

When your opponent can say you are a tough man to watch, you are well on the road to becoming a star. Stops and turns are as important in basketball as blocking and tackling are in football. A man who starts and stops slowly is easy to guard. The best basketball players are those who can stop, turn, and start quickly.

To make a quick stop slap both feet down hard on the floor. The whole foot should touch the floor. Keep the feet spread, the toes turned out just the least bit and on the same line. The knees should be bent to take up the shock of the stop. The body is held somewhat erect, and the weight is distributed on both feet. Keeping the feet spread out not only helps in

maintaining one's balance, but also permits an easy start in any direction. The best thing to use in developing quick starting and stopping is shadow boxing.

The ability to pivot or turn quickly and on balance is most important to all basketball players.

The Front Turn

This maneuver is executed when a dribbler, advancing down the floor, finds that he has been overtaken by an opponent, stops, turns and passes. The player with the ball comes to a halt on both feet, pivots on one and pushes off with the other. In the accompanying illustrations, he has centered his weight on his left foot, pushed off with the right, and then shifted his weight to his right foot. Having completed the pivot, the player is in position to throw, either a bounce or a push pass. The front turn usually takes place when the dribbler stops quickly to allow a defensive player to slide by; when the defensive player is overtaken, from the side and the rear; penetrating the forward line of defense; with two-on-one plays under the basket and coming down the floor on a fast break.

The Reverse or Back Turn

The back turn or reverse turn is used when a player with the ball, confronted by a defensive man wishes to pass back to a teammate. The offensive player comes to a halt on both feet, pivots on one and pushes off with the other. In the accompanying illustrations, the player has centered his weight on his right foot and has pushed off with his left. He, at all times, with his body protects the ball from his opponent. At the completion of the maneuver, he is in a position to pass, usually with a bounce or push pass. The back turn generally results when a defensive man advances in the path of an offensive player coming down the floor with the ball.

The above suggestions on one chapter in the Manual and the list of fundamentals as given in the article are worthy the consideration of every coach. The coach's own selection of illustrations and his own explanation of fundamentals give a personal touch to his coaching.—Editor's Note.

The Front Turn

Illustration 1—The player is dribbling toward the position where he is to make his turn.

Illustration 2—He gathers in the ball and begins to stop on both feet.

Illustration 3—The Stop.

Illustration 4—He has centered his weight on his left foot and is pushing off with the right foot.

Illustration 5—The player, part of the way around in the turn.

Illustration 6—Another stage of the turn—three-fourths of the way around. Note that the player is keeping his body between the imaginary player and the ball.

The Reverse Turn

Illustration 7—The player stops.

Illustration 8—The beginning of the turn.

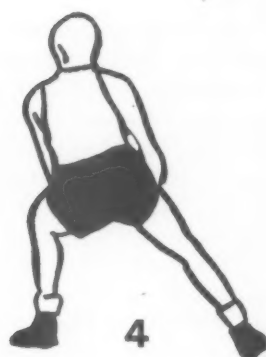
Illustration 9—Half of the way around, he has his weight centered on his right foot.

Illustration 10—The player continues to protect the ball with his body.

Illustration 11—With the completion of the turn, the player has gained ground to the side.

Illustration 12—The pass, following the back or reverse turn.

The Front Turn The Reverse Turn



The ATHLETIC JOURNAL

Nation-Wide Amateur Athletics

Vol. XX

November, 1939

No. 3

Published by
THE ATHLETIC JOURNAL PUBLISHING CO.
6858 Glenwood Avenue
Chicago, Illinois

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Character and Free Will

WE ran across a statement the other day which started a line of thought which may have some bearing on our athletic philosophy. The statement was this, "To give us character, God gave us freedom."

The implications of the idea contained in those words are these. We develop character by making our own decisions, solving our own problems, and fighting our own battles. The individual living under a totalitarian government is restrained in the matter of making decisions. His acts are circumscribed. The state ignores his personal problems and demands that he think only of the problems of the state. This means that free people living under the system of free government have the opportunity to develop self-reliance, faith in themselves and the ability to overcome obstacles.

What has this to do with athletics? Only this—on every play in a football game each player has to make his own decisions. The ball-carrier on an outside play has to decide whether to run wide or to cut back. The man whose duty it is to take the end out must decide in the fraction of a second whether to attempt to block him in or out or whether just to obstruct him. Every man on defense has to decide how to meet the attack after the play develops.

The coach may help the players by teaching proper fundamentals, and by helping the boys to make the right decisions, but after all, when the game starts each lad is pretty much on his own. In the same way, by and through education our children are given some instruction as to how they should play the game of life, but no school teacher or college professor can map out for any student the steps that he must take throughout his existence.

Cynical writers pooh-poo the idea that character is strengthened on the football field, but they do not present their definition of character. Certainly if one's training in athletics helps one to think decisively and correctly; to depend on one's own efforts for success, and to learn to do the right thing even if it is the hard thing, that must be character

training in the real sense of the word.

A poll of men who have played football would reveal that in their judgment their athletic experience did help them to develop desirable character traits.

Educational Athletics

THOSE of us who are engaged in athletic work in the schools and colleges are frequently confronted with the question as to whether or not athletics is a part of the educational scheme. We have at different times pointed out that the answer to the question depends upon the definition of education that we choose to accept.

Recently a college president who himself was an athlete during his undergraduate days expressed his opinion of this matter so succinctly that we are taking the liberty of presenting his point of view as follows:

"It seems to me that there are in American higher education two major points of view operating within institutions. The first of these takes the position that the student is what I would describe as a 'thinking machine,' and that the duty of the college is to receive him, to develop the thinking machine and to feel that the obligation of the institution ends there. In such a situation, while the general life of the student may be of some interest, his development in his relations with his fellows, in his emotional life, and in the development of his attitudes toward living, is not a vital concern of the institution.

"At the other extreme is the institution which feels a responsibility for the whole life of the student. Its aim is to provide four years of living, both intellectual and social, and it is interested in all phases of development of an undergraduate. This type of institution does not necessarily, though it may, have lower academic standards than the other. In many cases the standards are higher. It does, however, feel concern for what the student is doing during all of the twenty-four hours of the college day. To this end, health programs, sports programs, dramatic, music, journalistic and other programs assume an official importance in the set-up of the institution. To say that in such an institution athletes are not a part of the educational program is silly. To illustrate, just the other day I happened to be talking to one of our entering freshmen. When I asked him why he was coming out here to college, he said that he had two major interests in coming to college, one of them to play football, the other to study chemistry, and that he came here because he had found out that he could do both, and would not have to sacrifice either to the other. To say that football is not going to be part of this boy's education is simply ignoring the plain facts—incidentally, all of his placement tests were above the 90 percentile mark.

"Examples like this are not at all out of the ordinary—in fact, we would consider such a reaction an entirely normal one."

Football Offense in the Colleges in 1939

The East

A WEAK-SIDE reverse which has been used a great deal this fall is shown in Diagram 1. Back 3 receives the ball from center, spins and gives it to 4 who runs wide. One starts to the right and then comes back and receives the ball from 4. One, after receiving the ball, runs wide around the defensive right end. Three completes his spin and blocks the weak-side line-backer. Five blocks the defensive right tackle momentarily and then blocks the defensive right half-back. Six and 8 pull out of the line and run to the right, 8 blocking the defensive left end and 6 blocking either the strong-side line-backer or the left defensive half-back. The center blocks the defensive right guard; 9 blocks the defensive left guard, and 11 blocks the defensive left tackle. Ten goes through and blocks the safety.

Diagram 2 shows a fake plunge ending up with a lateral pass to 4 who runs wide. Three receives the ball from the center and starts forward as if to make a line plunge. Just as he reaches the line, he turns and tosses the ball to 4 who runs wide around the defensive left end. Five, 6, 9 and the center break down the field a few steps and then go to the right to get in front of the ball-carrier. Eight

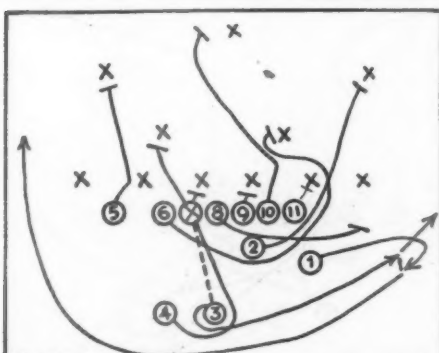
THIS year in the annual study of football offense in the colleges in this article and in the secondary schools in the article that follows, touchdown plays are presented. Since the purpose of the article is merely to keep the readers of this publication informed on the trend of offense, it has not been considered advisable to designate the institutions using the plays diagrammed in this issue. However, as has been the case in previous years, we shall be glad to pass on to the schools any communications regarding the plays described in these articles.

blocks the defensive right guard; 10 blocks the defensive left guard; 11 and 1 block the defensive left tackle and 2 blocks the strong-side line-backer.

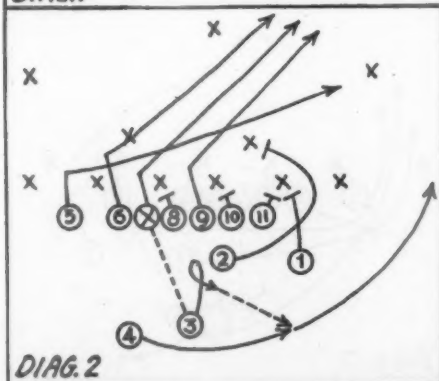
Diagram 3 shows a fullback plunge inside the defensive left tackle, ending up with a lateral pass. Three receives the ball from the center, plunges forward and pretends to give it to 2 and then drives inside the defensive left tackle. If he gets by the line of scrimmage, he may lateral to 4. The left end 5 blocks the safety; 6 blocks the defensive right tackle, the center and 9 block the defensive right guard; 10 blocks the defensive left guard and 11 blocks the strong-side line-backer. The right guard 8 pulls out and blocks the defensive left tackle out. Two fakes a lateral to 4. The wing-back 1 runs wide and blocks the defensive left half.

Diagram 4 shows a reverse inside the weak-side defensive end. The ball is passed back to 3 who fakes giving it to 4 and then gives it to 1. Five blocks the defensive right tackle in; 6 helps the center block the defensive right guard; 9 blocks the defensive left guard and 11 blocks the defensive left tackle out and then goes down the field in the path of the ball-carrier. Eight pulls out to block the defensive right end out, and 2 and 10 lead 1 with the ball as indicated.

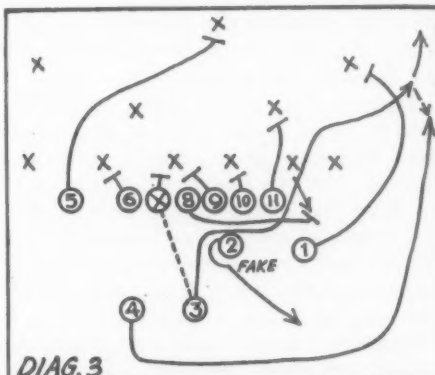
The type of plays shown in Diagram 5



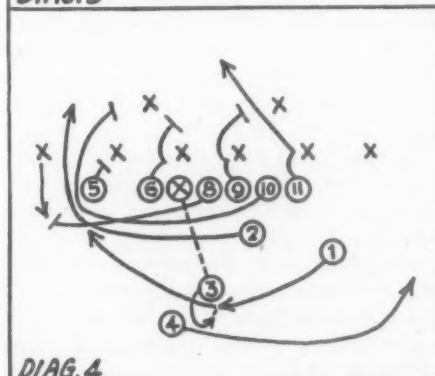
DIAG. 1



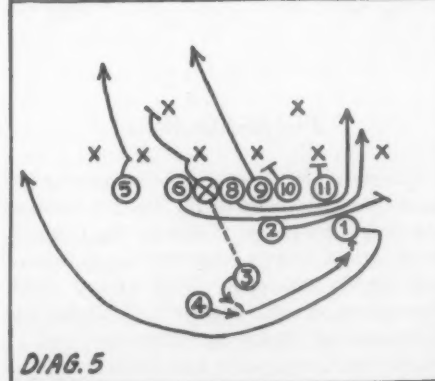
DIAG. 2



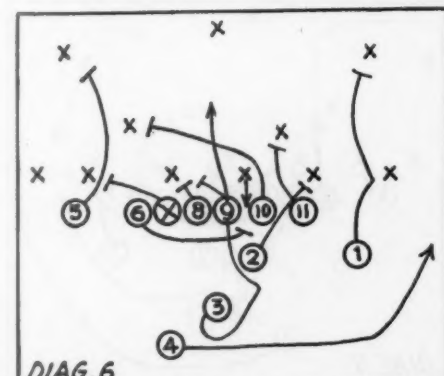
DIAG. 3



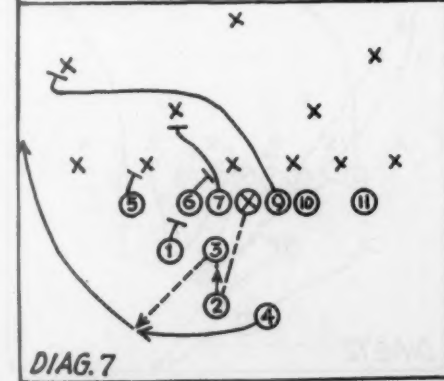
DIAG. 4



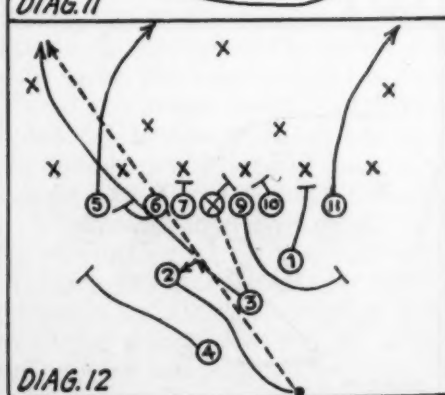
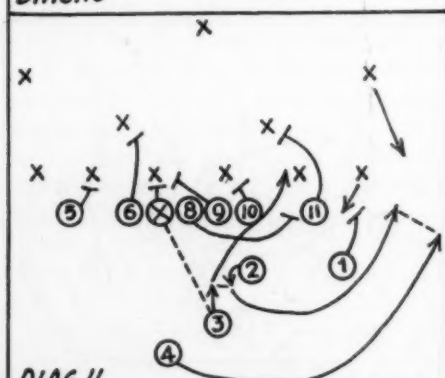
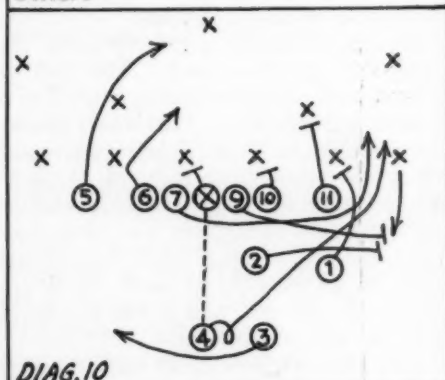
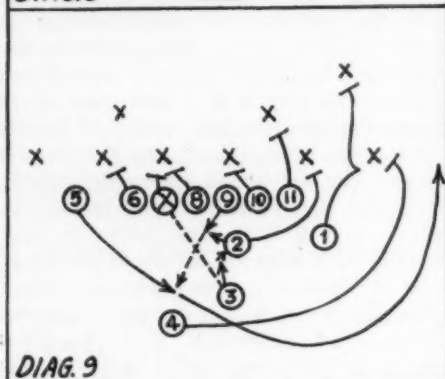
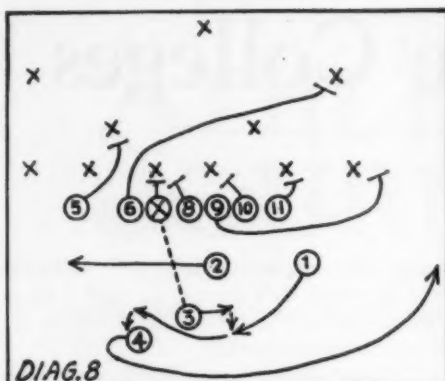
DIAG. 5



DIAG. 6



DIAG. 7



works on a defensive end that likes to follow a play around. The ball is snapped back to 3 who spins and gives it to 4. Four carries the ball as if he were going around the strong side but gives it to 1 who fakes right and then swings wide around the defensive right end alone. Five blocks the defensive right tackle and then goes down the field; the center blocks the defensive right guard and then blocks the weak-side line-backer; 9 goes down the field for the secondary; 10 blocks the defensive left guard; 11 blocks the defensive left tackle out and 2 blocks the defensive left end. Six and 8 pull out of the line and run toward the right.

Diagram 6 is a trap inside the defensive left guard. The ball is snapped to the fullback 3 who spins and fakes going inside the defensive left tackle but changes his course and drives inside the defensive left guard. Five goes inside the defensive right tackle and blocks the defensive right halfback; the center blocks the defensive right tackle out; 8 and 9 block the defensive right guard; 10 blocks the weak-side line-backer; 11 blocks the strong-side line-backer; 2 blocks the defensive left tackle and 1 blocks the defensive left end and then goes down for the defensive left half-back. Six pulls out of the line and traps the defensive left guard.

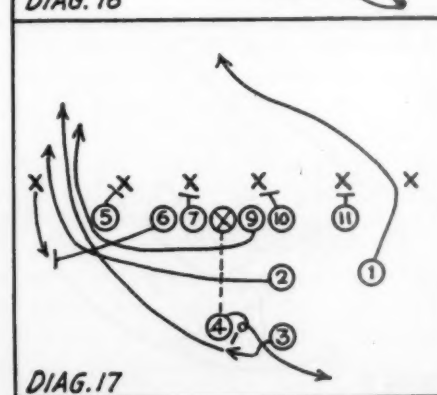
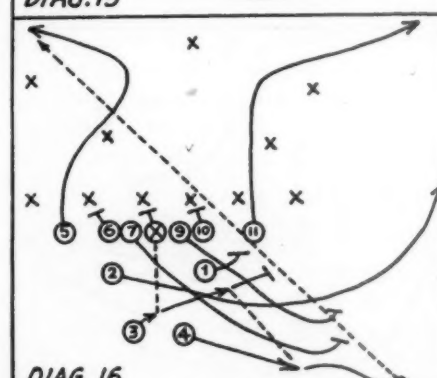
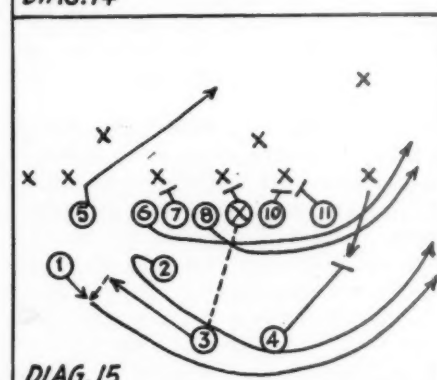
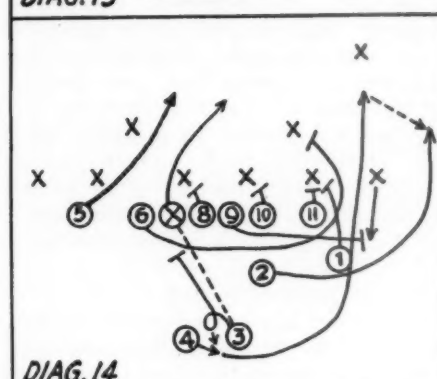
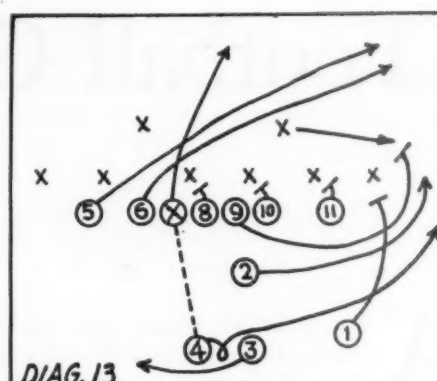
Diagram 7 is a fake buck, ending up with a lateral pass. The ball is snapped back to 3 who drives straight ahead and gives it to 2 who in turn laterals back to 4. This play differs from others of similar nature in that 4 goes around the defensive right end alone, depending entirely on catching the defensive end and secondary napping.

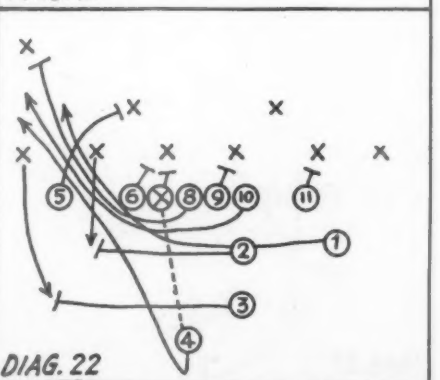
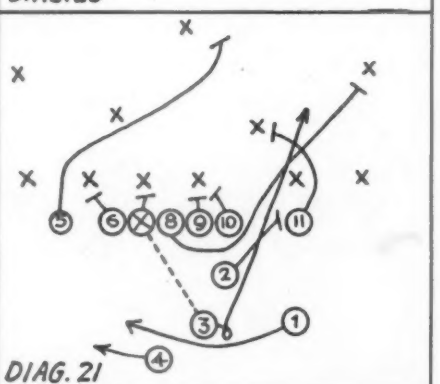
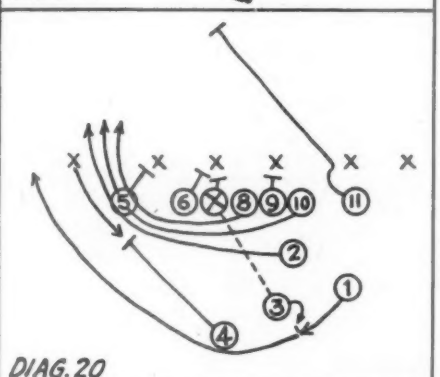
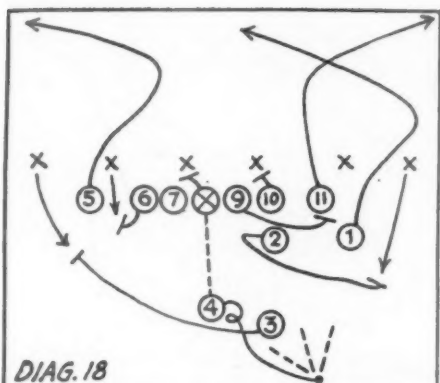
Diagram 8 shows a naked reverse to the strong side which has been used a great deal in the East. The ball is snapped back to the fullback 3 who gives it to 1 who starts as though on a reverse. The tail-back 4 takes two steps to his left, at which position he takes the ball from 1 and then swings back deep around the defensive left end. The lineman 9 delays two counts and then swings out to his right and leads the play.

Diagram 9 shows the famous end-around play used by an Eastern University. The ball is snapped back to the fullback 3 who bucks straight ahead. Lineman 9 turns and takes the ball from 3 and laterals back to the end 5 who swings wide around the defensive left end. The blocks are indicated in the diagram.

The Middle West

Diagram 10 shows a bootlegger play used by a Mid-west team. Back 4 receives the ball from center, fakes to the fullback 3 and then drives between the defensive left tackle and end. Nine and 2 block the defensive left end out; 1 blocks the defensive left tackle in. The right end 11 blocks the strong-side line-backer and the





lineman 7 leads the play outside tackle.

Diagram 11 shows a fake fullback plunge ending up with a lateral pass. The fullback 3 receives the ball from center, plunges forward and gives it to 2 who swings wide around the defensive left end. When the defensive left halfback comes up, he laterals out to the 4 back who has swung wide.

Diagram 12 shows a pass used very successfully by a Big Ten University. The fullback 3 receives the ball from center and drives to the weak side, giving the ball to 2 who comes back and forward-passes to the fullback who originally had the ball. The tail-back 4 blocks the defensive right end; 6 blocks the defensive right tackle; 1 blocks the defensive left tackle and 9 blocks the defensive left end.

Diagram 13 shows a bootlegger around the defensive left end. The tail-back 4 receives the ball from center, fakes to 3 and then runs wide around the defensive left end. The right end 11 blocks the defensive left tackle in and 1 blocks the defensive left end.

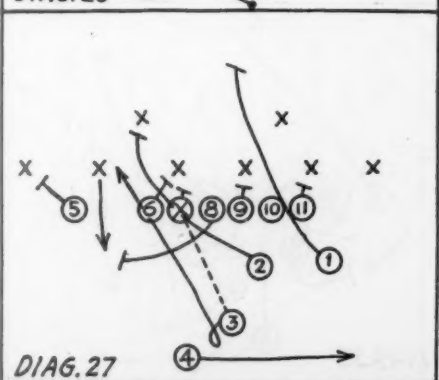
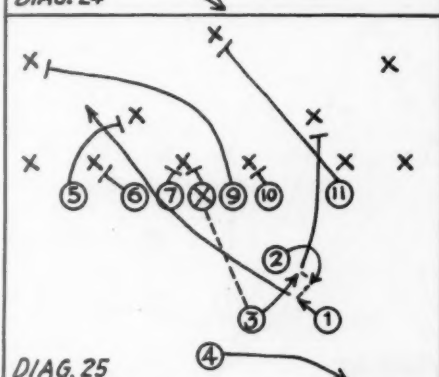
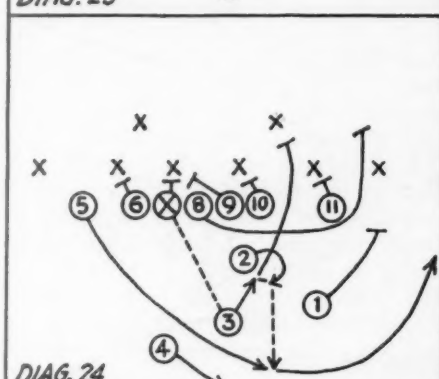
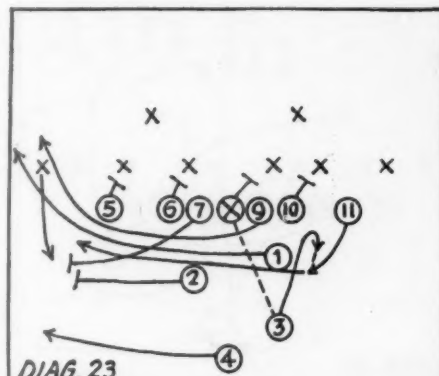
Diagram 14 shows an off-tackle with a lateral pass. The ball is snapped back to the fullback 3 who spins and gives it to the tail-back 4. The fullback continues his spin and blocks the defensive right tackle and end. The 4 back carries the ball between the defensive left tackle and left end. Back 2 fakes at the end and runs wide. The defensive left end is blocked out by the lineman 9.

Diagram 15 shows a deep reverse play used by a University in the Big Six. The ball goes to the fullback 3 who gives it to the wing-back 1 who swings deep and wide around the defensive left end. The tail-back 4 blocks the defensive left end in; 2 takes one step to his left and then swings to his right and is personal interferer for the ball-carrier.

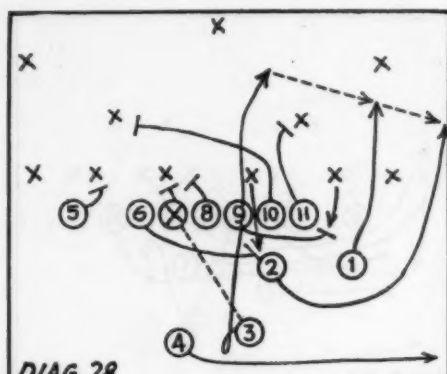
Diagram 16 shows a man in motion play used successfully in the Big Six. In this particular play, 2 starts in motion to the right and then heads to the flat and down the field. The fullback 3 takes the ball from center, drives toward the defensive tackle, going in front of the offensive left guard 7 and behind the offensive right guard 9. When the fullback gets close to the line, he laterals the ball back to 4 who throws a forward pass.

Diagram 17 shows a quick weak-side reverse with the fullback. The ball is snapped back to the tail-back 4 who gives the ball to the fullback 3 who carries it between the defensive right end and right tackle. The defensive right end is blocked out by the offensive tackle 6 and the defensive right tackle is blocked in by the end 5.

Diagram 18 shows a fake reverse forward pass. The ball is passed back to the 4 back who fakes to give it to the fullback 3, then drops back and forward passes to either offensive end or wing-back 1.



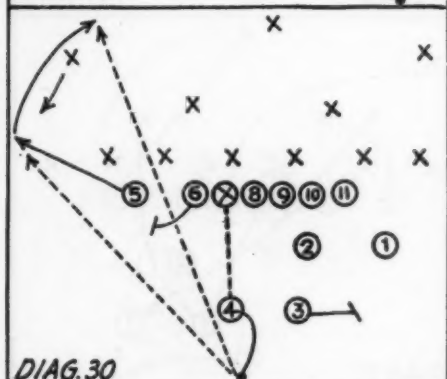
Rocky Mountain Region



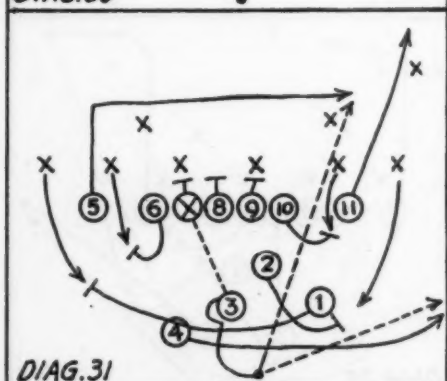
DIAG. 28



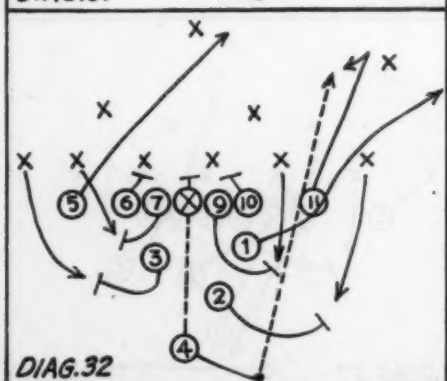
DIAG. 29



DIAG. 30



DIAG. 31



DIAG. 32

Diagram 19 shows a forward pass play from a spread formation that has been used successfully in the Rocky Mountain Conference. The guards are pulled back for protection.

Diagram 20 shows a deep reverse around the weak side from an unbalanced line. The ball-carrier goes around the defensive right end by himself and the interference goes inside the defensive right end. The defensive right tackle is blocked in by the offensive end 5 and the defensive right end is blocked in by the tail-back 4.

Diagram 21 shows a fake reverse buck inside the strong-side defensive tackle. The ball is snapped to the fullback 3 who fakes to give it to the wing-back 1 and then plunges inside the left defensive tackle. The guard 8 leads the play and back 2 blocks the defensive left tackle out.

Diagram 22 features a power play inside the short-side defensive tackle. The tail-back 4 receives the ball from center, steps back to time the play and then hits inside the defensive right tackle behind 8, 10 and 1 who lead the play.

Diagram 23 shows an end-around play from a short kick formation. The ball is snapped back to fullback 3, who drives forward to the line and then gives the ball to the offensive right end 11. The right end 11 then carries the ball between the defensive right end and defensive right tackle behind 9 and 1. The tail-back 4 swings wide for a lateral.

Diagram 24 features an end-around play. The ball is snapped to the fullback 3, who drives straight ahead and gives the ball to 2, who laterals back to the offensive left end 5, who runs wide around the defensive left end.

Diagram 25 shows a cross buck from a balanced line, single wing-back formation. The fullback 3 receives the ball from center, drives forward and gives it to 2 who in turn gives it to the wing-back 1 who drives inside the defensive right tackle.

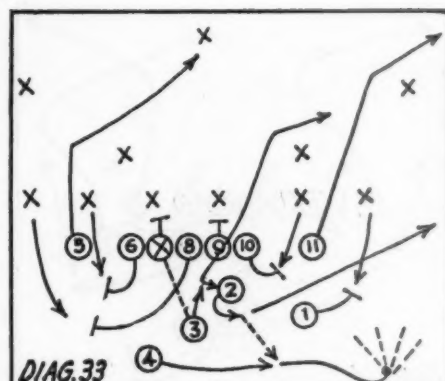
Diagram 26 shows a quick reverse forward pass. The ball is snapped back to the fullback 3 who hands it back to the 2. Two then runs to the right and forward-passes to either the offensive right end 11 or to the 4 back.

The Southeastern Region

Diagram 27 shows a fake and then a fullback buck inside the weak-side defensive tackle. The ball is snapped to the fullback 3 who fakes to the tail-back 4 and then smashes inside the defensive right tackle. The guard 8 pulls out and blocks the defensive right tackle out and the 2 back leads the play.

Diagram 28 is a check play for that shown in Diagram 27 with a trap on the defensive left guard. The ball is passed back to the fullback 3 who fakes to the

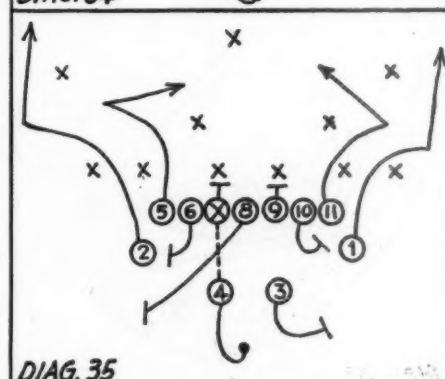
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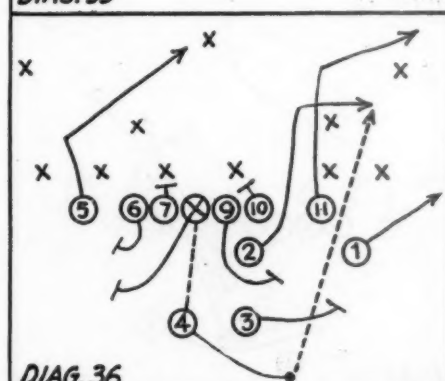
DIAG. 33



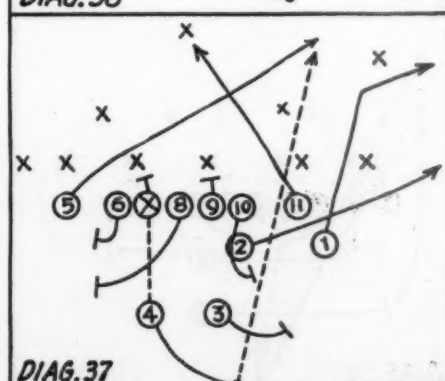
DIAG. 34



DIAG. 35



DIAG. 36



DIAG. 37

Football Offense of 1939 in the High Schools

Alabama

IN the play shown in Diagram 1, the ball is snapped to 3 who fakes to give it to 2, then gives it to 4 who goes over center. The left guard 7 pulls out and blocks the defensive right tackle, allowing the opposing guard to come through and be trapped by 1. Five blocks the right backer-up and 6 takes the left backer-up. The center and 9 take the defensive left guard. The play must get off before the left end can get in.

Diagram 2 shows a cut-back inside the defensive right tackle. The ball is snapped to 3 who starts to his left and cuts back inside the defensive right tackle and reverses his run to the right. The left end 5 sideswipes the defensive right guard with the help of 7. Six cross-blocks the defensive right tackle out with the help of back 2. The center and 9 block the defensive left guard; 10 blocks the weak-side line-backer; 11 blocks the defensive left tackle and then goes down the field; 4 blocks the defensive right end and 1 leads the play through the hole.

Arizona

The play shown in Diagram 3, as used by an Arizona high school this fall, has

an exceptionally good man in the left-wing position. Five blocks the defensive right tackle, goes down and across; 11 brushes the defensive left tackle and goes down; 6 and 8 go to the right; the center blocks the defensive right guard; 9 takes the strong-side guard. The ball is passed to 4 who spins and gives it to 3. Three fakes as though he were going to run and then fades back and, jumping in the air, passes on the run.

In Diagram 4, the ball is passed to 3 who fakes a reverse and then half spins into the line. Just as he gets a step from the line, he jumps, wheels and passes laterally to the tail-back who loafs out into position to receive the pass. Five blocks the defensive right tackle; 6 and 7 team

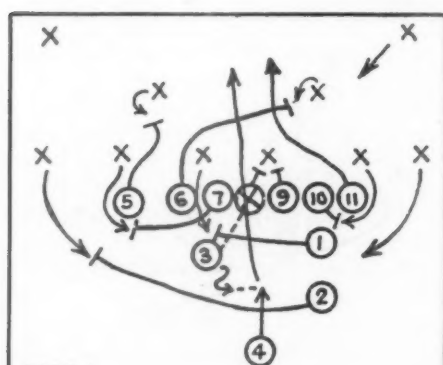
on the guard; the center blocks the defensive left line-backer; 9 and 10 take the defensive left guard and 11 blocks the tackle.

Washington, D. C.

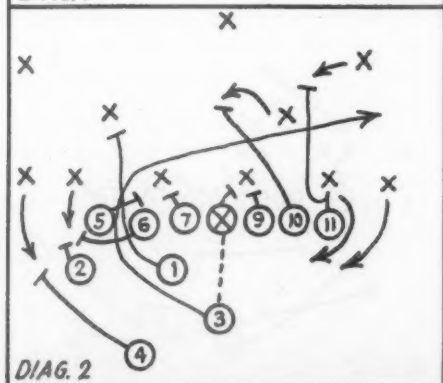
Diagram 5 shows a shovel pass play from 4 to 1. The ball is passed to 4 who takes a step back and tosses a forward pass to 1 who is running behind the line of scrimmage. Three and 5 block the defensive right tackle in; 6 and center block the defensive right guard; 9 blocks the defensive left guard; 11 blocks the defensive left tackle, and 2 blocks the defensive right end out. Eight and 10 lead the ball-carrier through the hole between the defensive right tackle and end.

Arkansas

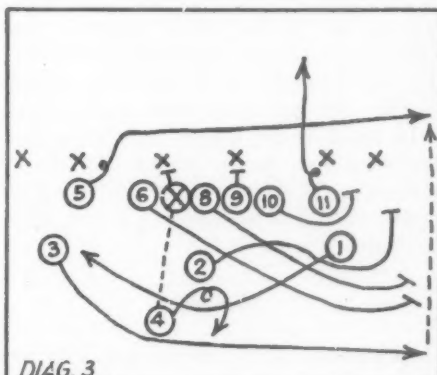
In Diagram 6 the ball is snapped to 3 who spins and hands the ball to 1 who runs outside tackle. The blocking assignments are: 4 starts wide to draw the defensive right end out so that 2 can block him out; 5 blocks the defensive right tackle; 6 and center block the right guard; 8 pulls out and takes the weak-side line-backer; 9 blocks the defensive left guard; 10 takes the strong-side line backer; 11



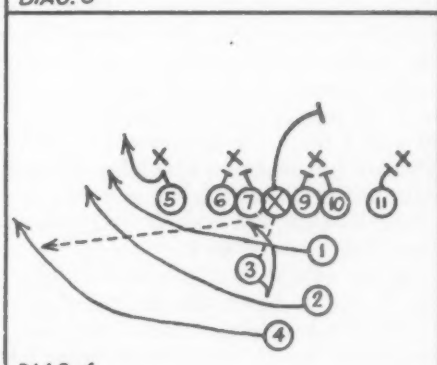
DIAG. 1



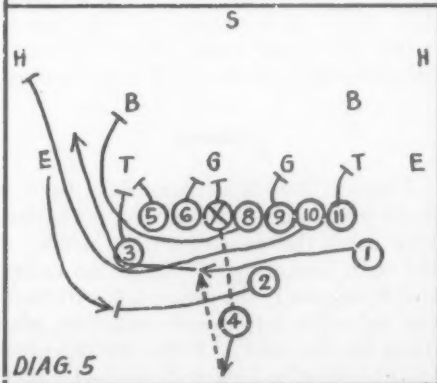
DIAG. 2



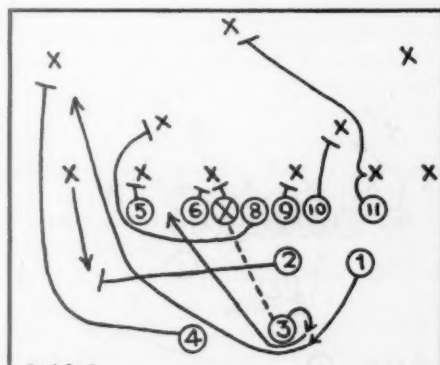
DIAG. 3



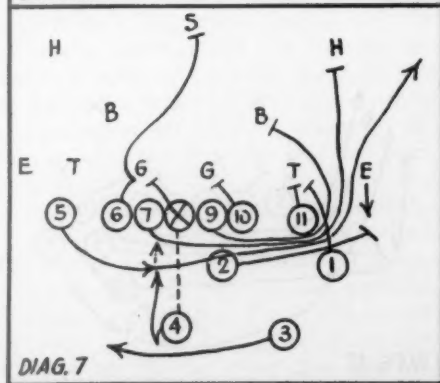
DIAG. 4



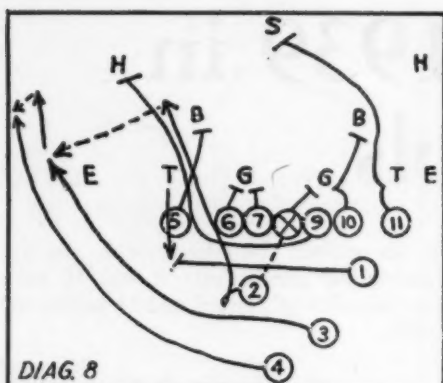
DIAG. 5



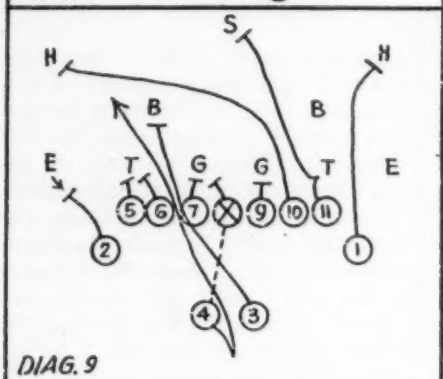
DIAG. 6



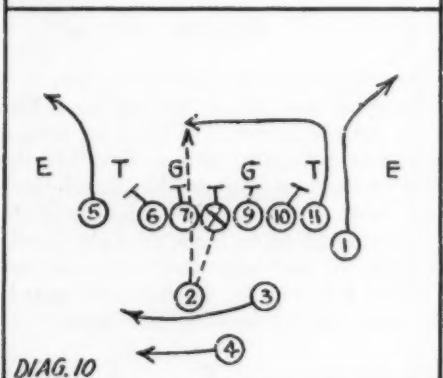
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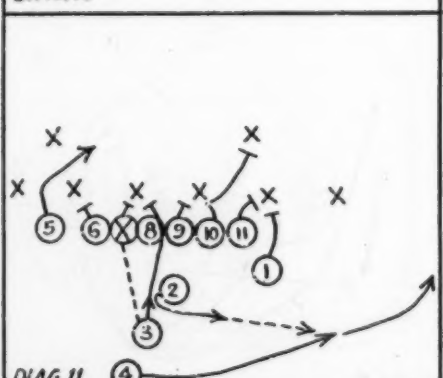
DIAG. 8



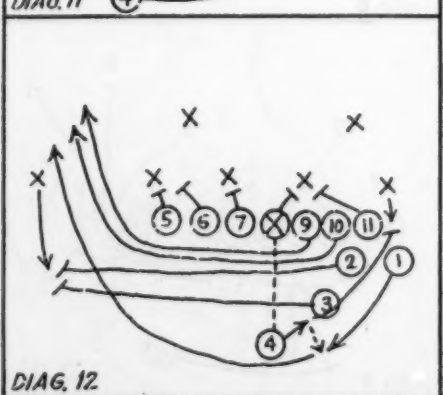
DIAG. 9



DIAG. 10



DIAG. 11



DIAG. 12

brushes the defensive left tackle out and goes for the safety.

Florida

Diagram 7 shows a shovel pass play to the end from a fake reverse. Two blocks the defensive left end out; 1 helps 11 take the defensive left tackle in. The ball is passed to 4 who fakes to 3, spins and tosses it forward to the left end 5 who comes around behind the line of scrimmage and carries the ball between the defensive left tackle and the left end. Seven and 9 lead the play through the hole.

Diagram 8—Two receives the ball from center, fakes to 3, spins inside tackle, laterals to 3 who may lateral to 4. Five blocks the defensive right backer-up; 1 traps the defensive right tackle; 6 and 7 take the defensive right guard; 10 helps the center on the defensive left guard and then takes the backer-up.

In the fake pass and run play, shown in Diagram 9, 2 blocks the right defensive end; 5 and 6 take the right tackle; 7 and the center block the right guard; 9 blocks the defensive left guard; 10 takes the defensive right halfback; 11 blocks the defensive left tackle, then goes for the safety; 3 blocks the weak-side line-backer. The ball is passed to 4 who fakes to pass to the right end, then runs inside tackle.

In Diagram 10, a pass from a position less than five yards behind the line of scrimmage is shown. Five, 11 and 1 go down. The ball is passed to 2 who fakes to 3, then passes to 11.

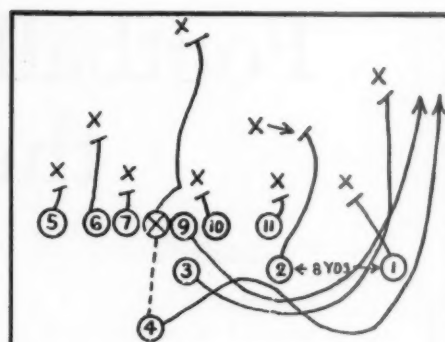
Illinois

In Diagram 11, 5 cuts down to take out the weak-side line-backer; 6 blocks the defensive right tackle; the center blocks the defensive right guard; 9 and 10 team on the defensive left guard and 10 goes on to block out the defensive left backer-up; 11 and 1 block the defensive left tackle. The ball is passed to 3 who fakes a plunge into the line, hands the ball to 2 who continues his spin and runs as diagrammed, then flips a lateral to 4.

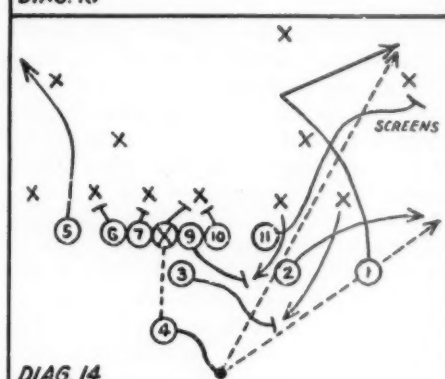
In the wide reverse, shown in Diagram 12, 5 and 6 block the defensive right tackle; 7 takes the defensive right guard; the center and 11 block the defensive left guard; 2 and 3 block the defensive right end. The ball is passed to 4 who hands it to 1 for a wide sweep around the right defensive end. Nine and 10 lead the play.

Indiana

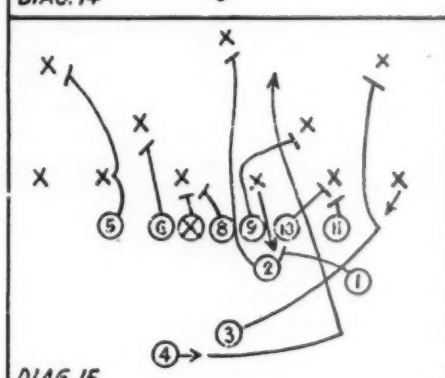
Diagram 13—A flanker play, from a single wing-back, balanced line formation. Five takes the defensive right tackle; 6 the right backer-up; 7 blocks the defensive right guard; the center helps 10 block the defensive left guard and then goes down for the safety; 1 hits the defensive left end drawing him in; 2 drives through



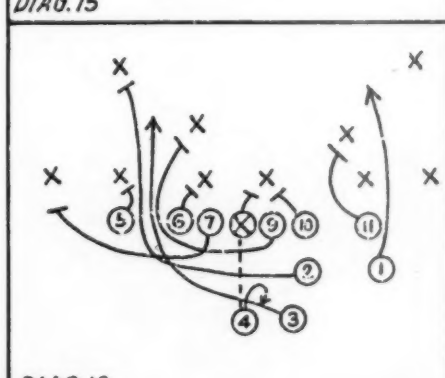
DIAG. 13



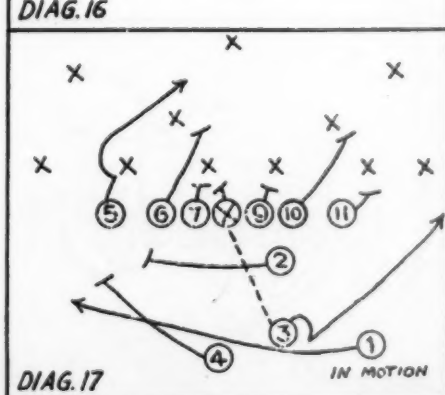
DIAG. 14



DIAG. 15



DIAG. 16



DIAG. 17

and takes the defensive left backer-up; 3 blocks the defensive left halfback. Nine leads the play. The ball-carrier 4 starts in, then goes out around the defensive left end.

Diagram 14—Five goes down and out; 6 takes the defensive right tackle; 7 takes the defensive right guard; the center helps 10 with the defensive left guard. One cuts at an angle back of the defensive left backer-up, then cuts out back of the defensive halfback. Eleven goes down in front of the defensive half. Three blocks the defensive left end; 9 blocks the defensive left tackle. The ball is passed to 4 who forward passes to 2 who has gone out into the flat, or he may pass to 1 if free.

The play shown in Diagram 15, a mousetrap on the guard from the outside, is run from a single wing-back unbalanced line with the ends out a yard. Five checks the defensive right tackle and goes for the halfback. Six blocks the backer-up on the weak side. The center and 8 block the defensive right guard. The inside tackle 9 goes through and takes the defensive left backer-up out, who will be pulled over as the ball-carrier starts wide. The outside tackle 10 together with the end 11 block the defensive left tackle. The quarterback 2 goes through for the safety. One blocks the defensive left guard. The fullback 3 drives at the defensive left end, then goes down for the defensive left half who will be widened out if the tail-back 4 starts wide. The ball-carrier 4 takes a lead pass and starts out as if going wide, puts his outside foot down and drives inside defensive left tackle and outside guard.

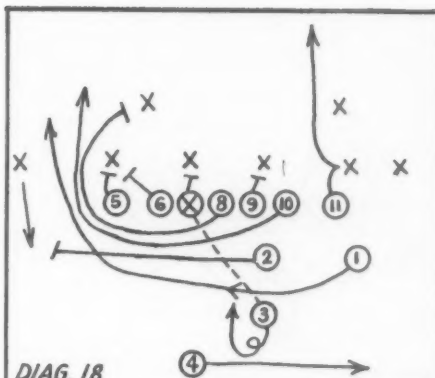
Diagram 16—The left end 5 blocks the defensive right tackle out; 6 blocks the defensive right guard in; 7 pulls out and blocks the defensive right end out. The center and 10 block the defensive left tackle. Nine pulls out and goes through on the right defensive line-backer. Eleven blocks the defensive left backer-up. Two goes to the left and blocks the defensive right halfback. One goes down for the safety. The ball is passed to 4 who spins and gives it to 3. Three drives on a reverse between the defensive right tackle and guard.

Idaho

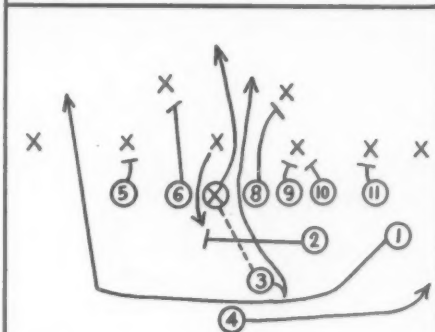
The fake reverse shown in Diagram 17 is used with the wing-back playing deep in Minnesota style and starting in motion before the snap of the ball. The ball is passed to 3 who fakes to 1 then half spins, runs around the defensive left end pouring on the speed. The blocking is not strong but the play depends upon the strength of preceding reverses and upon a speedy fullback.

Iowa

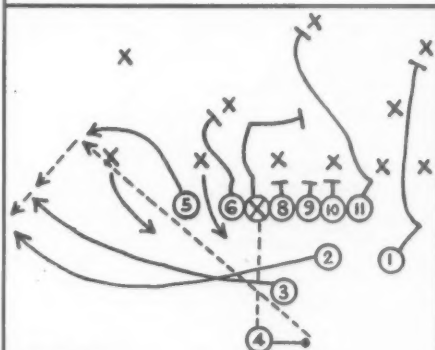
Diagram 18—With the backfield shifted



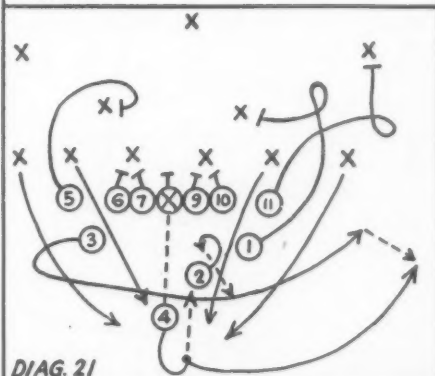
DIAG. 18



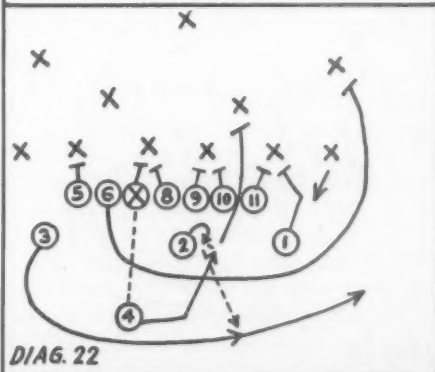
DIAG. 19



DIAG. 20



DIAG. 21



DIAG. 22

to the right, the ball is passed to 3 who spins, faking to 4 as he goes to the right. One coming around, gets the ball and goes inside end and outside the defensive weak-side tackle. The line blocking end 5 and the guard 6 take the defensive right tackle. The center blocks the defensive guard and the inside tackle 9 takes the defensive left guard. The strong-side guard 8 and the outside tackle 10 lead the play. Two blocks the defensive right end.

The play shown in Diagram 19 is a check-off of the play in Diagram 18, with a trap on the defensive right guard. The ball is snapped back to 3 who fakes to 4 and to the wing-back 1 and then goes through the hole between the two defensive guards. The two guards and center let the defensive right guard through and 2 mousetraps him from the side. The left end 5 blocks the tackle; 6 blocks the right defensive backer-up and 8 takes the left backer-up. The center leads the play. Nine and 10 block the defensive left guard. If the defensive guards play closer, 8 and 9 take the guard and 10 takes the line-backer.

Kansas

The play shown in Diagram 20 was used successfully last year and is being used with equal success again this year. Five goes out to the left; 6 blocks the weak-side line-backer; 8, 9 and 10 take the defensive guards; 11 blocks the defensive left tackle out and goes for the safety. The center takes the left defensive backer-up. One blocks the defensive left end and goes down for the left halfback. Four cross-steps to his right and feints a run to the right. He steps with his right, pivots and passes in the same motion to the left end 5 who has gone forward two steps and out three steps, has turned and is waiting for the pass. After catching the pass, 5 uses a basketball push-pass to 3 sweeping wide around the end. Two swings wider for a possible second lateral. This play works well against a 7-1-2-1 defense and in a passing situation where the backs are a little farther back.

The play shown in Diagram 21 was first used by a Kansas coach to worry the tackles and ends who rushed the passer. It has developed into a good ground gaining play and strengthened the team's other pass plays. Five circles around over the defensive center, stops and watches the pass and gets into position to block him as the pass is made. Eleven goes down to the defensive left halfback and out. He also watches the pass and gets into position to time his block on the half. One circles the end and "lays" for the defensive left line-backer. Two makes a weak attempt to block the defensive left tackle, pivots back behind the line and waits for the pass. Three starts after the defensive right end and lets him go by, turns and watches the forward pass, then cuts be-

hind 2 for the lateral. The passer 4 fades back to a position about twelve yards back of the scrimmage line and looks toward the defensive right halfback. He telegraphs the pass by holding it high near his ear and waits until the tackles and ends are upon him, then throws an over-hand forward pass to 2 and at the same time starts wide around his right end for the second lateral. The five center men are responsible for the two guards. Sometimes the linemen let the guards through and 2 carries the ball through the center.

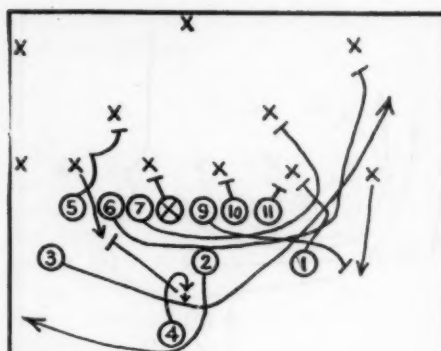
The play shown in Diagram 22 has been used by a Kansas coach within the 15-yard line. The strength of this play lies in the fact that most coaches are smashing their ends against a double wing-back formation. Five blocks the defensive right tackle. The center and 8 block the defensive right guard; 9 and 10 the defensive left guard; 11 and 1 the defensive left tackle. Two pivots to the right outwards and turns his back to the line of scrimmage, squats low and waits for the ball with his arms across his body, his left elbow high. Four takes two steps to the right, cuts into the line, running low, and as he brushes 2, hands him the ball. Two tosses a wide lateral to 3 who runs for the corner of the field.

Kansas

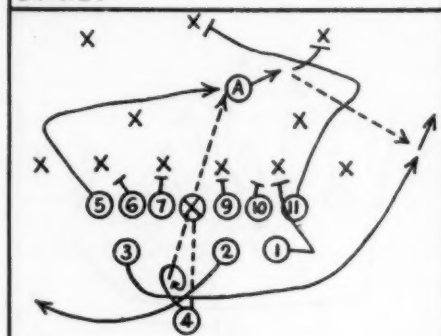
In Diagram 23, a double wing-back play is shown. The ball is snapped to 4 who steps forward and fakes to give it to 2 and then gives it to the wing-back 3 who carries it between the defensive left tackle and end. Four completes the spin into the line; 5 blocks the defensive right line-backer; the center blocks the defensive right guard; 10 blocks the defensive left guard and 11 and 1 block the defensive left tackle in. The right guard 9 blocks the defensive left end out; 6 and 7 lead the ball-carrier through the hole. Two must do a good job of faking; 3 must be fast, 1 a good blocker and 4 a good ball-handler and faker.

In Diagram 24, the backfield functions the same as in the preceding play. Four steps toward 2 with his right foot, does a half spin as if to give the ball to him, grips the ball and passes it to 5 who times himself to be at the assigned spot A at the right time. Two fakes to carry the ball.

The play shown in Diagram 25 is designed to succeed against over-anxious tackles. Five blocks the right backer-up; 6 and the center take the defensive right guard; 9 the defensive left guard; 10 blocks the defensive right halfback and 11 the left backer-up. One goes down to block the safety. Eight mousetraps the defensive right tackle. Four takes a step to the right to allow 3 to sweep by. He then drives into the line after getting the ball from 2 who faked to give it to 3, going outside the defensive right guard.



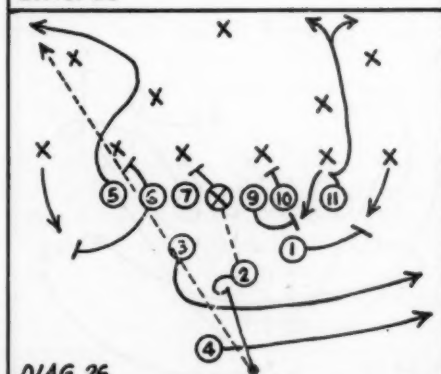
DIAG. 23



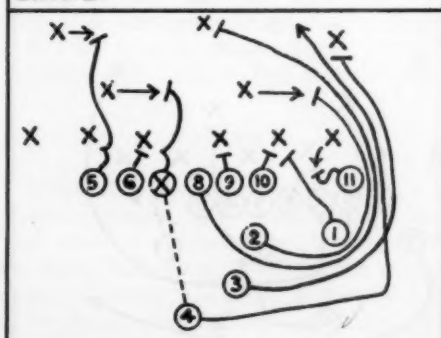
DIAG. 24



DIAG. 25



DIAG. 26



DIAG. 27

Louisiana

The favorite scoring play of a Louisiana school is shown in Diagram 26. The ball is passed to 2 who spins, faking to 3, and then tosses the ball back to 4, giving the ends time to get down beyond the defensive halfbacks. Five fakes to the right, then cuts wide to the left. Eleven shoulder-blocks the defensive left tackle and drives down field with optional cut as shown in the diagram.

Maine

Diagram 27—The team that uses the play diagrammed in 27 comes out of the huddle in a deep punt formation with ends split five or six yards. Then it shifts to a single wing unbalanced to the right. Five brushes the defensive right tackle and takes the halfback; 6 blocks the defensive right guard. The center helps 6 on the guard, then takes the weak-side line-backer; 9 blocks the defensive left guard; 10 and 1 block the tackle; 11 blocks the defensive left end in; 2 takes the left backer-up; 8 goes around and down for the safety; 3 blocks the defensive left halfback. The ball is passed to 4 who sweeps around the defensive left end.

A shuttle pass is shown in Diagram 28. Six blocks the weak-side tackle; the center takes the guard; 9 blocks the defensive right backer-up; 10 blocks the strong-side guard; 11 and 1 block the strong-side tackle in; 8 takes the left backer-up; 2 blocks the safety; 3 blocks the defensive left halfback; the defensive left end is allowed to come in to rush the passer. The ball is passed to 4 who fakes a forward pass and throws an underhand shuttle pass to 5 who has come across.

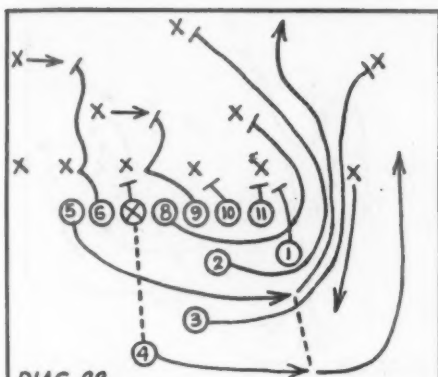
Massachusetts

In Diagram 29, 5 goes down, 6 blocks the defensive right guard, 7 drops back; 9 and 10 block the defensive left guard; 11 cuts down field and goes to the left, back of center; 1 blocks the defensive left tackle. The ball is passed to 4 who goes to the right and makes a short bullet pass over center to 11.

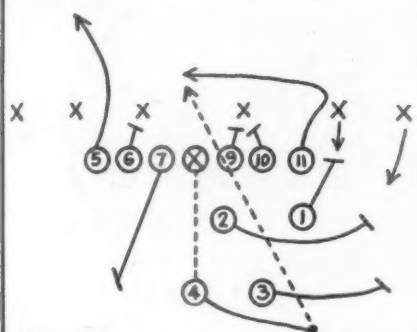
Diagram 30 shows a double reverse. The ball is passed to 3 who takes two steps to the right and lateral passes to 2 who starts to the left, passing the ball to 4 who cuts inside end. The two guards go down field to block the line-backers; 5 blocks the weak-side tackle; the center takes the weak-side guard; 9 and 10 take the strong-side guard; 11 blocks the tackle and 1 blocks the defensive left end.

Michigan

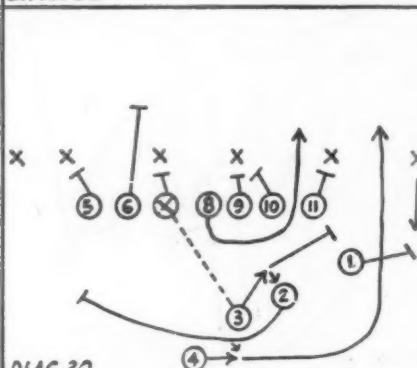
A reverse is shown in Diagram 31. Ten and 11 block the defensive right halfback and backer-up; 8 blocks the defensive



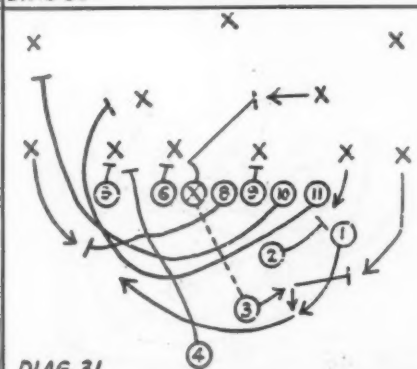
DIAG. 28



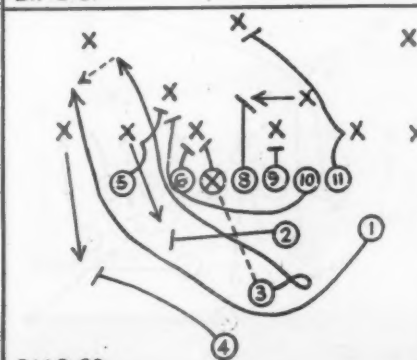
DIAG. 29



DIAG. 30



DIAG. 31



DIAG. 32

right end; 5 blocks the weak-side tackle; 6 takes the weak-side guard; the center brushes past the weak-side guard and takes the defensive left backer-up; 9 blocks the strong-side guard; 4 helps 5 block the weak-side tackle in. One receives the ball from 3 and drives off tackle.

In the spin or fake reverse in Diagram 32, 5 and 10 block the right backer-up; 6 and the center take the defensive right guard; 2 mousetraps the defensive right tackle; 8 takes the left backer-up; 9 blocks the defensive left guard; 4 blocks the defensive right end. One sweeps wide to the left. The ball is passed to 3 who half spins and goes through outside guard and passes to 1.

Minnesota

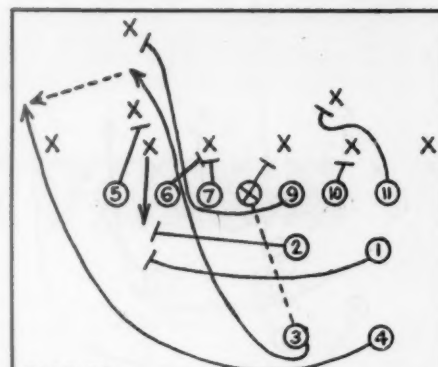
In Diagram 33, 5 takes the defensive right backer-up; 6 and 7 team on the defensive right guard and drive him in; the center takes the defensive left guard; 10 the defensive left tackle; 11 blocks the defensive left backer-up. The defensive right tackle is permitted to come through and is trapped by 1 and 2. Three receives the pass from center, fakes giving it to 4, then spins and cuts inside the defensive right tackle, with 9 leading the play. After 3 cuts through the line, he laterals to 4 who has gone out around the defensive right end.

The ball is passed to 3 who makes a full spin faking to give it to 2 who continues as shown in Diagram 34. Three passes to 11 who laterals to 5. Five continues on and laterals to 3. The line holds tight; one blocks to the right and 4 to the left. This play was used most effectively in 1938 by an undefeated Minnesota team and during the present season up to date is a consistent ground-gainer.

Mississippi

The play shown in Diagram 35 is run from a short punt formation with balanced line. Five and 6 block the defensive right tackle; 4 takes the right end; 7 and center block the defensive right guard; 9 blocks the defensive left guard; 11 brushes the left tackle and takes the left line-backer. The ball is passed to 3 who steps to the right, staying low, turns and gives the ball to 2 who goes over outside the right guard. Ten and the blocking back 1 lead the play.

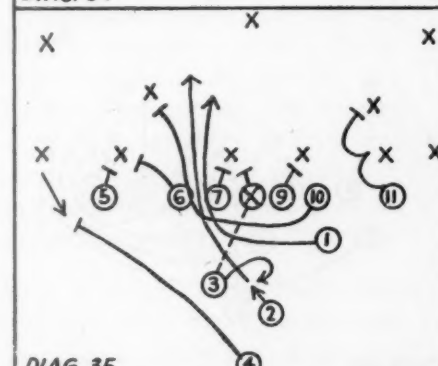
In Diagram 36, 5 fakes to shift out on the shift count but does not and blocks the defensive left line-backer out; 6 takes the defensive right tackle; 7 and center block the defensive right guard; 9 and 10 block the defensive left guard; 11 takes the left tackle. The ball is passed to 3 who fakes to give it to 2, then half spins into the hole over his own right guard with the blocking back 1 leading the play. Two goes on through as if carrying the ball and blocks the right line-backer.



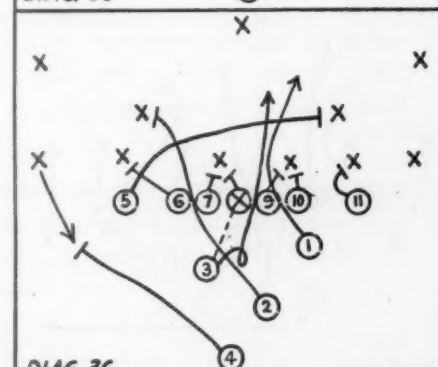
DIAG. 33



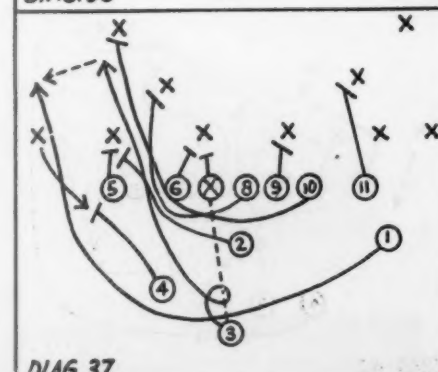
DIAG. 34



DIAG. 35

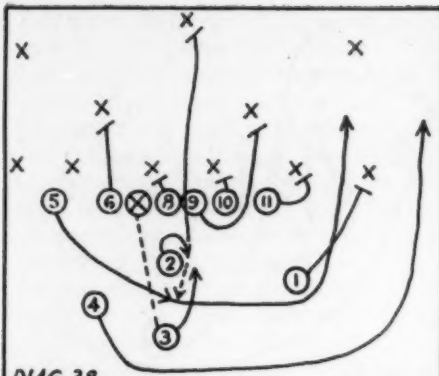


DIAG. 36

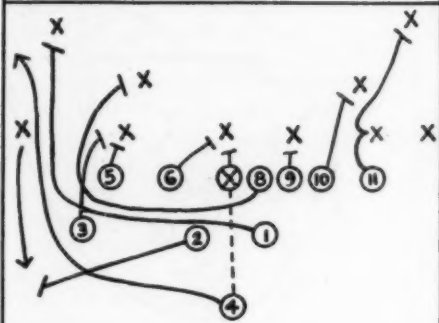


DIAG. 37

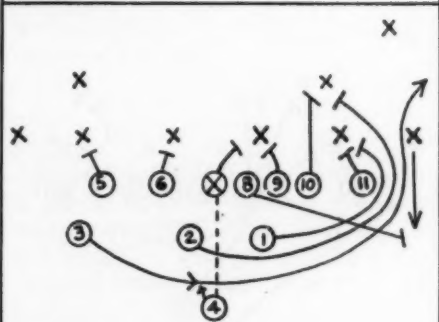
Missouri



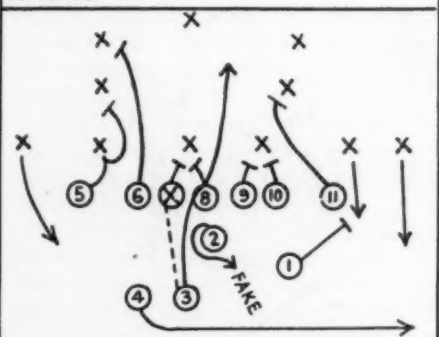
DIAG. 38



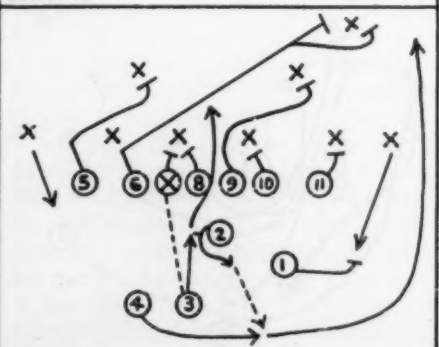
DIAG. 39



DIAG. 40



DIAG. 41



DIAG. 42

In the play shown in Diagram 37, 5 and 2 block the defensive right tackle out; 6 and center take the guard; 11 blocks the defensive left backer-up; 8 blocks the weak-side line-backer; 10 blocks the defensive right halfback; 4 blocks the defensive right end. The ball is passed to 3 who plunges into the line outside guard and inside tackle.

In Diagram 38, the ball is passed to 3 who drives into the line as on the previous power play. The ball is bootlegged to 2. The left end 5 swings around two yards back of 2 and receives a backward pass. Four swings wide for a lateral. The play goes either inside or outside end.

In Diagram 39—Three and 5 block the defensive right tackle; 8 pulls out and blocks the defensive right line backer; 6 and center block the defensive right guard; 9 takes the defensive left tackle; 10 blocks the defensive left line-backer; 11 brushes the defensive left tackle and blocks the left halfback. Two blocks the defensive right end. The ball is passed to 4 who goes outside tackle with 1 leading the play. If the defense does not shift to meet the unbalanced line to the left, the play shown in Diagram 40 is very effective. Eight pulls out to block the defensive left end; 11 and 1 block the left tackle in; 10 takes the defensive left line-backer; 9 and center block the defensive left guard. The ball is passed to 4 who passes to 3 as he sweeps outside tackle.

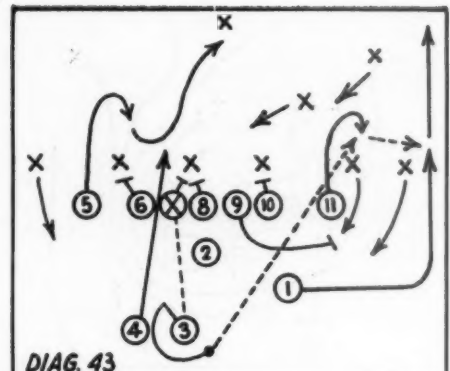
Montana

In Diagram 41, 5 blocks the defensive right tackle and goes down for the defensive right backer-up. The center and 8 block the defensive right guard; 9 and 10 block the strong-side defensive guard; 11 goes down for the strong-side line-backer. The ball is snapped to 3 who fakes to give it to 2 and then goes on down over his own right guard. Two spins and fakes a backward pass to 4.

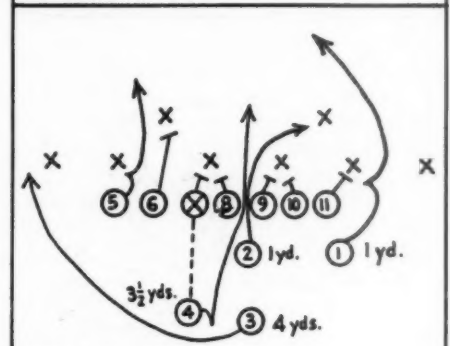
In Diagram 42, 5 blocks the weak-side line-backer; 6 bumps the defensive right tackle and goes down for the defensive left halfback; the center and 8 block the defensive right guard; 9 goes down for the defensive left backer-up; 10 blocks the defensive left guard; 11 blocks the defensive left tackle; 1 blocks the defensive left end who is easily drawn into a blocking position by a fake buck into the line, the play resembling the one just described in Diagram 41. The ball is snapped to 3 who gives it to 2. Two spins and laterals to 4 who goes wide around the defensive left end.

In Diagram 43, 5 blocks the weak-side line-backer and goes for the safety; 6 blocks the defensive right tackle; the center and 8 block the defensive right guard; 9 pulls out and blocks the defensive left

(Continued on page 28)



DIAG. 43



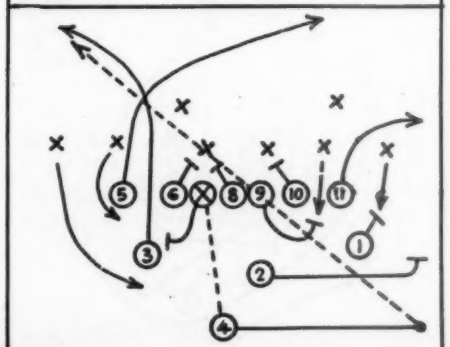
DIAG. 44



DIAG. 45



DIAG. 46



DIAG. 47

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Style 57. A very fine white upper and non-marking sole. A very dressy shoe.

Football Offense of 1939 in the High Schools

(Continued from page 24)

tackle. Ten blocks the defensive left guard. The ball is snapped to 3 who fakes to 4, fades back two steps and shoots a short pass to the right end 11. Eleven laterals to 1 who has gone around the defensive left end. The defensive left line-backer is pulled in fearing a buck; the defensive left half has been pulled in to stop a short pass.

Nebraska

In the play shown in Diagram 44, the left halfback fakes the ball to 3, using a half spin, then drives through the hole between 8 and 9, led by the 2 back. The blocking assignments are as follows: 5 slows up the defensive right tackle then goes out for the right half; 6 takes the short-side line-backer; the center and 8 block the defensive right guard; 9 and 10 block the defensive left guard; 11 blocks the defensive left tackle out and 1 brushes him as he goes down for the secondary. The two men on each side of the hole use a high low block on the defensive guards; the other linemen use check blocks.

The play shown in Diagram 44 may be used as a build-up for the one shown in Diagram 45. The ball is passed to 4 who spins, fakes to 3, starts into the line, jumps into the air and throws a short pass to 11 who has gone down and crossed over. Eleven may lateral to 3 who has gone out around the defensive right end.

Nevada

Diagram 46 shows a double reverse play from a double wing-back balanced line with ends out. The ball is passed to 2 who starts toward the left and passes to 3 who carries the ball to the right, passes to 1 who goes wide around the defensive left end. Seven and 2 block the defensive right end; 5 blocks the defensive right tackle; 6 helps the center on the guard then goes down for the right line backer; 10 blocks the defensive left guard; 11 brushes the tackle and blocks the left backer-up. Nine leads the play.

The play shown in Diagram 47 develops as a right end run. The ends 5 and 11 go down field. Three goes through the line behind the left end and delays as long as possible then breaks out to the left for a cross-pass. Six and 8 block the defensive right guard; 10 takes the left guard; 1 blocks the defensive left end; 9 blocks the defensive left tackle. The ball is passed to 4 who goes to the right and shoots a pass to 3. The pass is dangerous if intercepted, but if not, it usually scores.

New York

In Diagram 48, the blocking assignments are as follows: 5 takes the defensive right tackle; 6 pulls and blocks the defensive

right end; the center and 8 team on the right guard; 9 and 10 together block the defensive left guard; 11 blocks the defensive left tackle in; 1 goes to the right and blocks the incoming defensive left end; 3 goes through to the left backer-up. Four receives the ball and drives to the line between 9 and 10, stopping short when he gets to the line, turns and throws a lateral to 2, who runs around his own right end.

North Dakota

Diagram 49—The ball is passed to 4 who starts out as if to sweep, then throws a running pass to 1, 5 or 11. The guards and the other two backs furnish ample blocking. If the passer is also a good ball-carrier, his sweeps and passes may be made to appear so much alike that the defense is confused.

The success of the play shown in the off-tackle cutback in Diagram 50 depends on excellent one-on-one blocking. The ball is passed to 1 who starts straight out to the left so as to draw in the defensive end and thus set up the block for 3. The flanker 4 and 5 work on the defensive right tackle. The weak-side guard 9 is pulled out and assigned to the deep half. Two blocks the backer-up on the strong side while the strong-side guard 7 knifes through and takes the other backer-up. The weak-side end 11 goes down for the left defensive half. The ball is passed to 1 who starts out straight to his left, then cuts in off tackle.

In Diagram 51, 5 brushes the defensive right tackle and goes to the secondary; 6 and the center team on the defensive right guard; 7 pulls out of the line and leads the interference around his right end, taking the defensive halfback; 9 pulls out of the line and teams with 2 on the defensive left end; 10 takes the left guard alone; 11 takes the left tackle alone; 1 cuts through and takes the left backer-up; 3 pulls ahead to lead the interference with 7; the ball is snapped to 4 who runs to his right then cuts in, following his interference outside tackle.

In Diagram 52, 5 counts five and pulls out to left flat for a pass reception; 6 teams with the center on the defensive right guard; 8 pulls out of the line and blocks the defensive left tackle; 9 and 10 team on the defensive left guard; 11 angles for a deep diagonal; the ball is snapped to 4 who starts around his right end; 4 hands the ball to 2 on a reverse and then continues on down the field; 2 runs to his left and is in position to pass to 5, 11 or 4. This play works most effectively if 2 is a left-handed passer.

Ohio

In Diagram 53 we find 5 brushing the

defensive right tackle and going on down into the secondary for the defensive center; 6 and the center team on the defensive right guard; 8 pulls out of the line and mousetraps the defensive right tackle which 5 let sift through; 9 takes the defensive left tackle; 10 takes the left backer-up; 11 brushes the left defensive end and goes down into the secondary; 4 brushes the right defensive end and goes on down to the right of the secondary; the ball is passed to 3 who hands it to 2; 3 then carries out the spin and continues the deception with the aid of 1 who carries the ball on a reverse; 2 sneaks outside right guard. This play may be easily worked into a double lateral as both 4 and 1 are in suitable positions.

Diagram 54 shows a pass play that is worked in sequence with a push pass down the center. Five plays a little wide and as soon as the ball is snapped runs down for eight yards bearing to his right and then veers sharply to his left; 6 takes the defensive right tackle; the center takes the defensive right guard; 8 pulls out of line and gets the defensive right end who has not been molested; 9 takes the defensive left guard; 10 mousetraps the defensive left tackle; 4 comes across to take the opposing left end; the ball is snapped to 3 who starts toward the line; 3 hands the ball to 2 who fades back to pass; 3 then carries out the threat of another push pass by leaping high in the air; this will draw the defensive halfbacks in, enabling 1 and 5 to get beyond them; 3 then goes on over center and is eligible for a pass; the pass is to 5, 3 or 1; 5 and 1 turn in to fake the push pass and then, as the defensive halfbacks come in, break beyond them.

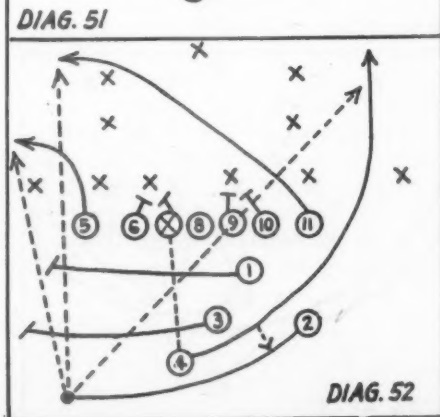
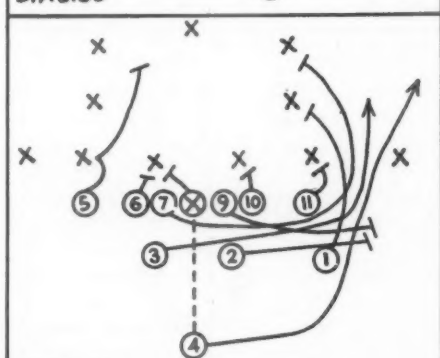
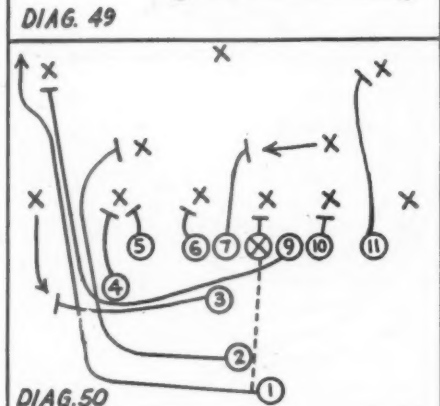
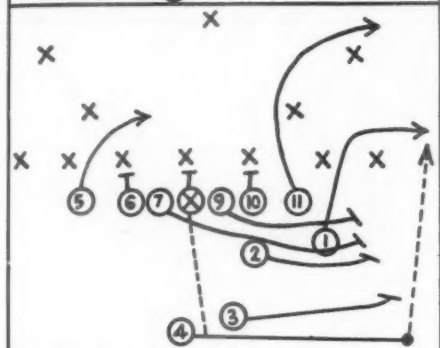
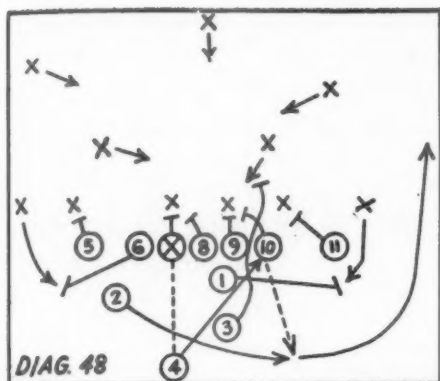
Oklahoma

In Diagram 55 the blocking assignments are as follows: 5 goes down to the secondary; 6 blocks the defensive right tackle; 7 takes the guard; 9 blocks the defensive left guard; 10 takes the tackle; 1 goes through for the left secondary; 3 blocks the defensive right end. The ball is passed to 4 who forward-passes to 11 who has taken 2 or 3 steps, stopped and turned. Eleven laterals to 2 and goes downfield.

In Diagram 56, 8 and 11 block the defensive right end; 3 and 5 block the defensive right tackle; 6 takes the defensive right guard; 9 the left guard; 10, 2 and 1 sweep to the left. The ball is passed to 4 who fakes to give it to 1 as he runs to the left. Four keeps the ball and runs to the right.

Oregon

Diagram 57 shows a play that is used with phenomenal success by a large Oregon high school. After running a couple



of plays inside tackle the team uses this pass. The blocking assignments are as follows: 5 blocks the defensive right tackle; 8 blocks the defensive right guard; 9 and 10 block the defensive left guard in; 3 and 11 block the defensive left tackle out. The ball is passed to 4 who fakes to give it to 2 and then drives inside tackle. As he reaches the line of scrimmage, he straightens up and lobs a pass to 1.

The play, shown in Diagram 58, also used by a large Oregon school, is a double half spin and checks on half spin plays inside and through the middle. The blocking assignments are as follows: 5 blocks the defensive right tackle; 6 and the center block the defensive right guard; 9 blocks the defensive left guard; 10 blocks the defensive left end out; 3 blocks the defensive right end. Four receives the ball, fakes to give it to 3, spins and starts into the line, makes a half spin and gives it to 1, who sweeps around the defensive right end, with 2 and 8 leading the play.

Pennsylvania

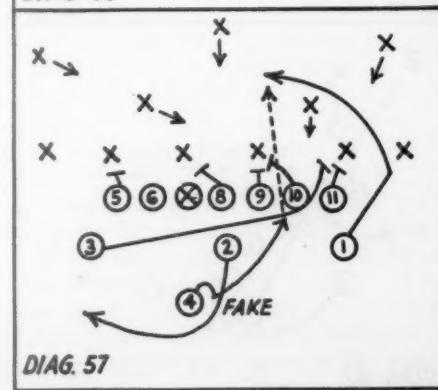
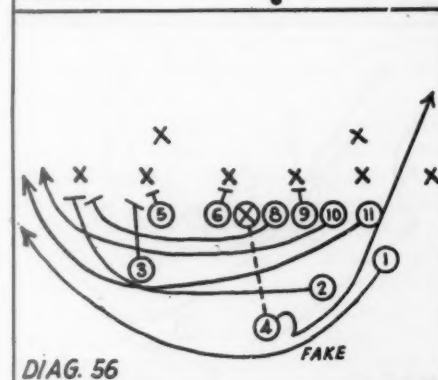
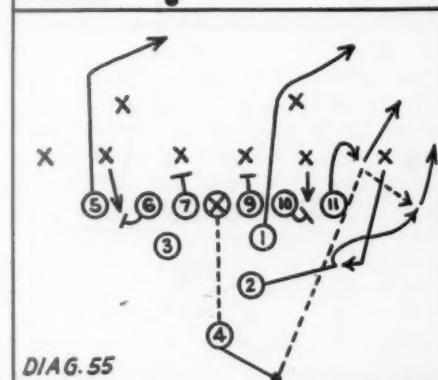
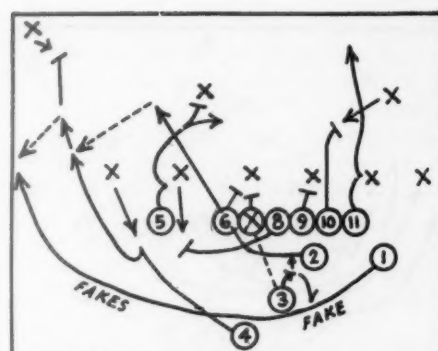
In Diagram 59, the blocking assignments are as follows: 5 blocks the weak-side line-backer; the defensive right tackle goes through to be trapped by 8 and 2; 6 blocks the defensive right guard; the center blocks the left backer-up; 9 blocks the defensive left guard; 11 blocks the defensive left tackle and assists 1 in blocking off the secondary. The ball is passed to 4 who fakes to pass and runs inside tackle.

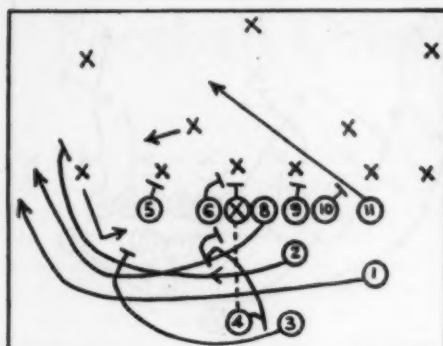
The play shown in Diagram 60 is used as a check play on a line buck by the tail-back. Five brushes the defensive right tackle and goes down field; 6 takes the line-backer; the center blocks the guard; 8 pulls out and blocks the defensive left end; 9 and 10 block the defensive left guard; 11 blocks the line-backer and 1 blocks the tackle. The ball is passed to 4 who plunges into the line, handing the ball to 2 who laterals to 3 for a sweep around the defensive left end.

In Diagram 61 we have a fake with the fullback carrying the ball; 5 charges through to the right defensive backer-up; 6 and the center team on the right defensive guard; 8 pulls out of the line and mousetraps the defensive right tackle; 9 takes the left defensive guard; 10 pulls out of the line and goes inside the right defensive tackle and down to the right halfback; 11 brushes the defensive left tackle and goes down into the secondary; 2 mousetraps the left defensive tackle; the ball is snapped to 3 who spins and fakes to 1 coming around; 3 completes the spin and drives inside tackle; 4 brushes the right end and continues into the secondary.

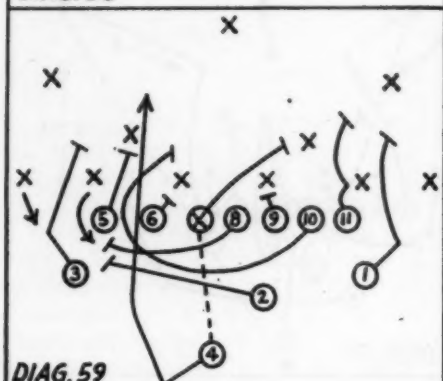
Rhode Island

In Diagram 62 we have a pass play from T formation. The whole line blocks for a pass; 5 brushes the defensive right tackle

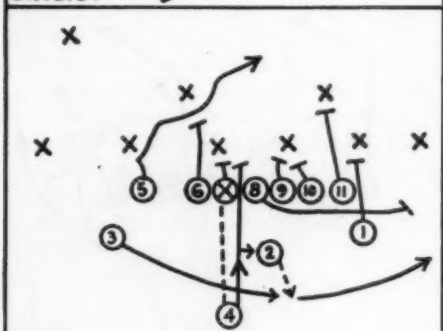




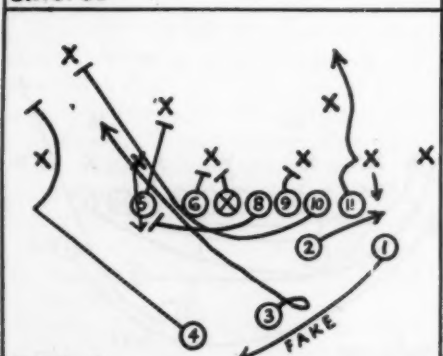
DIA. 58



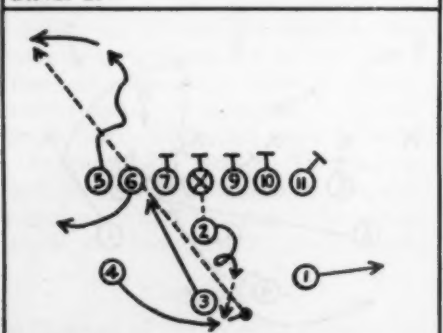
DIA. 59



DIA. 60



DIA. 61



DIA. 62

and goes on down cutting sharply to the left for a pass; 6 pulls out and blocks the right end; 7 and the center team on the right defensive guard; 9 and 10 team on the left defensive guard; 11 takes the left defensive tackle; 1 blocks the left defensive end; the ball is snapped to 2 who spins, faking the ball to 3; 3 carries out the fake and hits inside tackle; 4 comes across and takes a lateral from 2; 4 then shoots a pass to 5 who is cutting to the left.

South Dakota

In Diagram 63, 5 brushes the defensive right tackle and diagonals across into the secondary; 6 follows 5; the center and 9 team on the right guard; 8 cuts through and takes the left backer-up; 10 takes the left defensive guard while 11 takes the left tackle; 2 comes across and takes the left defensive end; the ball is snapped to 3 who spins faking the ball to 1; 3 then drives outside tackle; when 3 reaches the line of scrimmage, he laterals to 4 who is trailing.

In Diagram 64 we have a fake reverse. The play goes inside tackle. 5 brushes the right defensive tackle in and goes diagonally across to the secondary; 6 takes the opposing tackle; the center drives down for the safety man; 8 pulls out and mousetraps the defensive left tackle who is playing wide; 9 steps into 8's place and takes the right defensive guard; 10 and 11 take the left defensive guard; 1 drives through for the left backer-up; 2 leads the interference; the ball is snapped to 4 who spins and fakes to 3 and then drives inside tackle.

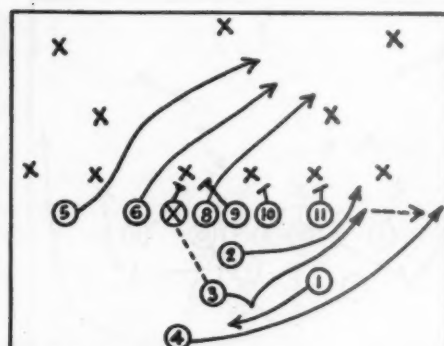
Tennessee

The series shown in Diagrams 65, 65A and 65B have been used by several teams this year with success.

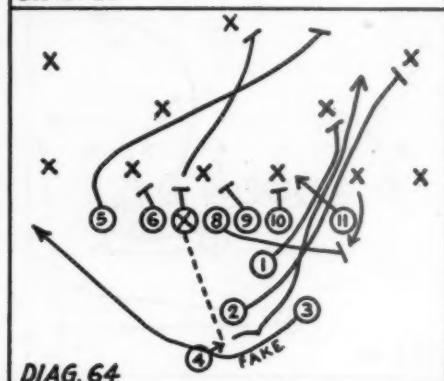
The blocking assignments in Diagram 65 are: 5 blocks the defensive right tackle; 6 blocks the right guard; 7 pulls out and takes the end; 9 takes the defensive right line-backer. The ball is passed to 4 who fakes to give it to 2, then gives it to 1 who goes around the defensive right end.

In 65A, the weak-side defensive guard is let through and mousetrapped by 1; 6 blocks the defensive right tackle; 5 takes the line-backer; 7 blocks the defensive left end; 9 and 10 team on the left guard while 11 takes the left tackle. The ball is passed to 4 who fakes to 2 and hands the ball to 3 who drives straight into the line.

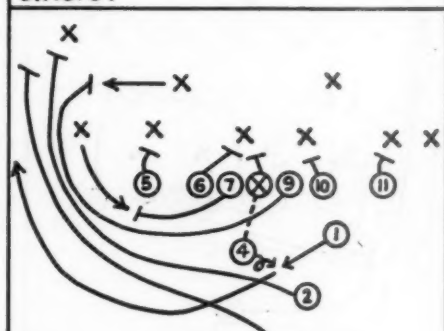
The play in 65B has no power and depends on deception. Five continues his assignment on the right backer-up; 6 continues to work on the right tackle; 7 takes the right guard; 9 pulls out for interference; 10 takes the guard while 11 takes the tackle; 1 takes the end who is driving in; 4 receives the ball and fakes to 2 who drives across with 3; 4 delays, holds the ball on his hip and then goes



DIA. 63



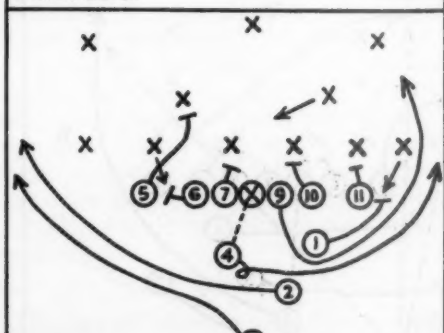
DIA. 64



DIA. 65



DIA. 65-A



DIA. 65-B

around the defensive left end; 9 leading.

Texas

In Diagram 66, 5 brushes the right tackle and goes down after the safety man; 6 pulls out and comes around inside tackle to take the left backer-up; the center hits the defensive right guard; 8 brushes the right guard and goes on over to cut off the left backer-up; 9 and 10 team on the left guard while 11 takes care of the left tackle; 1 brushes the left end and then goes down for the left halfback; 2 comes through to help 11 on the left tackle; the ball is snapped to 3 who spins and fakes to 4 and then drives inside tackle. Note the angle blocking that 6 gets on the opposing fullback.

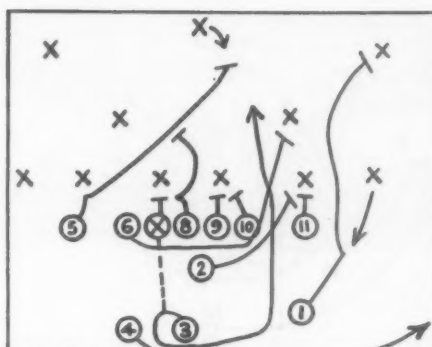
In Diagram 67 we have a sweep that runs in sequence with 66. Five has the same task of brushing the right tackle and going down for the safety man; 6 drives across the line and diagonals across the secondary; the center again takes the opposing guard, with 8 giving the same help as in the preceding play; 9 pulls out and goes inside end to take the left backer-up; 10 takes the left guard; 11 blocks the left tackle and 1 takes the left end; the ball is again snapped to 3 who spins, this time handing the ball to 4 who sweeps his right end after picking up 2 for interference; 3 completes the spin and hits inside tackle to carry out the fake.

In Diagram 68 we see some nice mouse-trapping by both the center and the outside tackle. Five drives into the secondary and heads for the safety man; 6 drives through, going across diagonally and takes the left backer-up; the center pulls out and mousetraps the right defensive tackle who has been permitted to advance across the line unmolested; 8 and 9 team on the left guard while 10 mousetraps the right defensive guard who has been invited in by the offensive center's maneuver; 11 takes the left tackle; 1 cuts through the hole and blocks the shortside line-backer; 4 goes down for the left halfback; the ball is snapped to 3 who half spins and fakes to 2; 3 then drives over his own guard; 2 continues around and is in position for a lateral.

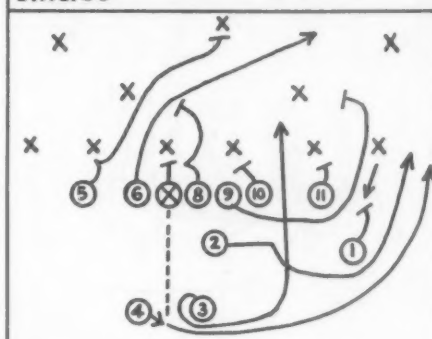
In Diagram 69 we have a semi-spread play; 5 diagonals across the secondary; 6 pulls out to trap the defensive right end, should he venture across; the center takes the right tackle while 9 takes the right guard; 8 pulls out to help 2 protect against the onrushing left guard and tackle; 10 steps back around 11 and traps the left end; 11 and 1 both go down the field to decoy the secondary; the ball is snapped to 4 who laterals to 3; 4 continues on around his left end; 3 fades back, runs to the right and then throws a forward pass to 4.

Utah

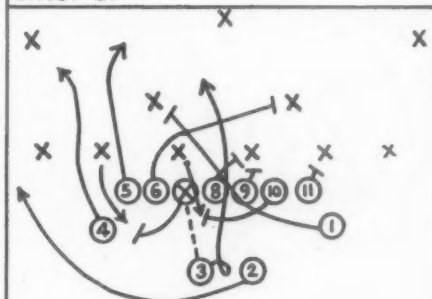
In Diagram 70 we have a forward pass



DIAG. 66



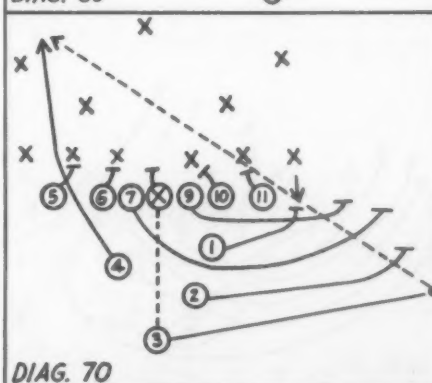
DIAG. 67



DIAG. 68



DIAG. 69



DIAG. 70

play from the short-punt formation. Five takes the right tackle while 6 is working on the right guard with the help of the center; 7 and 9 pull out to lead the interference in order to give the appearance of a wide sweep; 10 and 11 work on the left guard and tackle respectively; 1 meets the left end as he charges in; the ball is snapped to 3 who follows 2, 7 and 9 to his right. Suddenly he stops and passes across to 4 who has cut out to the right side of the secondary.

Diagram 71 illustrates a fake kick and run. Five drives through for the right backer-up; 6 takes the right guard as 7 pulls out and drives down for the right halfback; the center drives through for the backer-up on the left side; 9 pulls out for interference while 10 and 11 work on the left guard and tackle; 2 takes the right tackle who has been permitted to come through; 1 swings around for interference; the ball is snapped to 4 who takes his steps for kicking and then hands the ball to 3; 3 goes wide and escapes the opposing left end who has been permitted to drive in for the supposed kicker.

Vermont

In Diagram 72 we have a shovel pass to the strong side end, the play going off the weak side. Five pulls out of the line and runs over to take the shovel pass from 1; 6 pulls out and runs interference; 7 takes the defensive right guard; 8 pulls out and teams with 3 in trapping the left tackle; the center and 10 team on the left guard; 11 takes the backer-up on his side; 2 drives across for the left end while 4 blocks the right tackle; the ball is snapped to 1 who feints to the right and shoots a shovel pass to 5. This play can be mixed up with 1 faking the shovel pass and driving through himself, using 5 and 6 for interference.

Diagram 73 shows a play that is used to prevent guards from tearing through on the passers. Five goes through for the strong side backer-up, while 6 takes care of the right defensive tackle; 7 takes the right guard as the center goes through into the secondary; 8 meets the left end as he comes in while 3 works on the left guard; 10 takes the left tackle and 11 the backer-up on the weak side; 4 brushes the right end and goes down for the right halfback; the ball is snapped to 2 who fakes a lateral to 1 and then drives inside guard on the strong side.

Virginia

Diagram 74 is a spinner play. Five brushes the right tackle and goes on down for the safety man; 6 goes straight into the secondary and then diagonals toward his right; the center and 7 team on the right guard, while 9 and 10 team on the left guard; 11 goes down for the strong-side backer-up and 1 goes for the left

halfback; 2 traps the left tackle as he comes in; the ball is snapped to 3 who spins, faking the ball to 4 and then drives inside tackle; 4 carries out the fake.

Diagram 75 is a double reverse run from the double wing-back. Five takes the right tackle as the center takes the right guard; 6 goes through for the weak-side backer-up; 9 and 11 take the left guard and left tackle; 8 and 10 swing out to the left and lead the interference with 2; the ball is snapped to 4 who starts to his left and then hands it to 3; 3 goes to his right and then hands the ball to 1 and continues on to block the left end; 1 swings wide following 8, 10, 2 and 4. Usually the right end is sucked in, but must be taken off his feet if not sucked in.

Washington

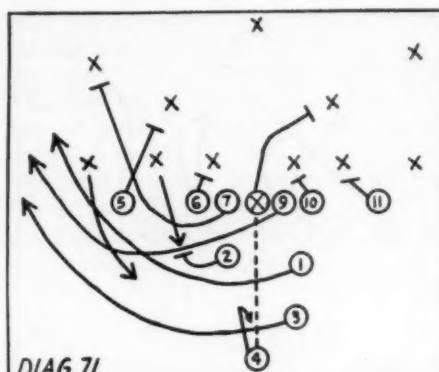
Diagram 76 is a short end run. Five goes through and takes the safety; 6 comes out of the line and takes the strong-side backer-up; the center works on the right guard while the two tackles 9 and 10 team on the left guard; 11 takes the left tackle and the left end is taken care of by 2 and 3 who come across; 1 swings around the end and then cuts in to block the left halfback; 4 receives the ball from center and starts wide then cuts back outside tackle and picks up 6 and 8 for interference.

Diagram 77 is a long pass play. Five drives at the weak-side backer-up but does not touch him and goes on toward the left halfback; 5 crosses behind 11 who is first to cross the middle; 6 drops back to protect the passer from the right end; 8 drops back to protect against the defensive right tackle; the center slows up the defensive right guard; 9 and 10 take the defensive left guard, although sometimes 9 helps the center as indicated; 11 diagonals to the left; 2 and 3 drop back to protect against the left end and tackle; 4 drops back and throws to either end (5 or 11); 1 can be sent to several spots as indicated in case the defense puts two men on each offensive end.

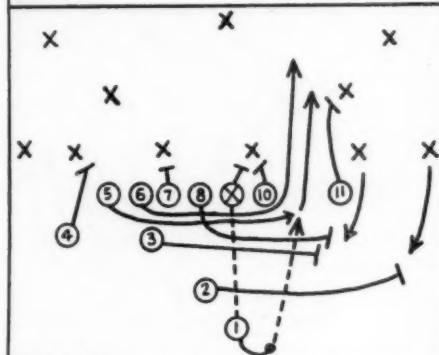
Wisconsin

Diagram 78 is a reverse play. Five takes the defensive right tackle; the center, 6, 8 and 9 work on the right and left guards; 10 and 11 come out of the line and lead the interference outside tackle; 4 drives across and gets a nice angle block on the right end; 1 receives the ball from center and drives toward the strong-side; 1 hands the ball to 3 and then teams with 2 on any defensive linemen coming in from the strong-side.

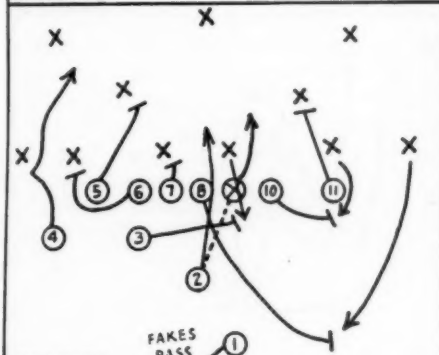
Diagram 79 is a spinner with the ends spread; 5 hesitates, forcing the right tackle to go around him and then drives for the backer-up; 6 and 7 team on the right guard, the center, 9 and 10 team on the left guard; 11 drives across to block



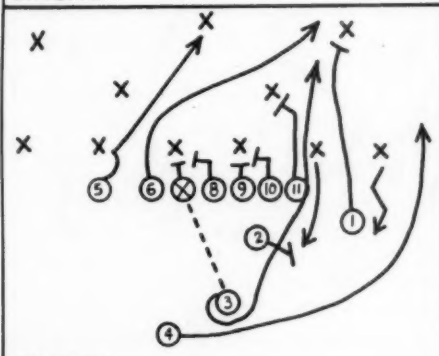
DIAG. 71



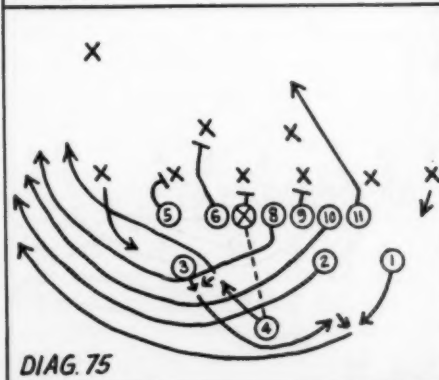
DIAG. 72



DIAG. 73



DIAG. 74



DIAG. 75

the right halfback; 4 drives across and cuts down the defensive right tackle who was forced to come around 5; 1 receives the ball from center, spins and fakes to 3 then drives inside tackle; 3 brushes the defensive right end out of the play and continues around eligible for a lateral; 2 continues on around and is also in position for a lateral.

Diagram 80 is an inside tackle play on the short-side; 5 brushes the right tackle and goes through to block the backer-up on the weak-side; the center and 6 team on the right guard; 8 takes care of the left guard; 9 pulls out and traps the right tackle with a nice angle block; 10 takes the defensive left tackle with a little help from 11; 11 after brushing the tackle drives for the backer-up on the strong-side; 2 comes across and gets a good angle block on the right end; 3 drives around end and heads for the right halfback; the ball is snapped to 4 who spins and fakes to 1, then drives outside right guard; 1 carries out the fake, comes around and is in position for a lateral.

Diagram 81 is a pass play with four eligible receivers. Five drives for the right halfback and then changes direction toward the safety; 6 takes the opposing tackle; the center, 9 and 10 work on the two guards; 8 pulls out to trap the left tackle; 11 angles to get beyond the left halfback; 2 cuts inside tackle and drives to get behind the strong-side backer-up; 3 blocks the left end and continues on into the flat; 4 receives the snap-back, runs to his right, then fades and passes to 2.

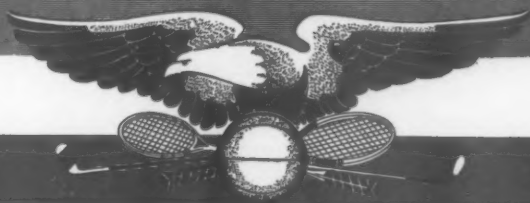
Wyoming

Diagram 82 is a forward lateral pass play run from a single wing-back with an unbalanced line and the ends out. Five, 11 and 1 go down into the secondary as decoys; the center and 6 team on the right guard; 9 and 10 team on the defensive left guard; 8 pulls out of the line as though to lead the interference and continues around to await a lateral; 2 hesitates then steps over the line and awaits the pass from 4; after receiving the pass, 2 laterals to 8; 3 protects the passer; 4, after passing, runs into the flat to protect the lateral against interception.

Diagram 83 is a slant off right tackle from a punt formation. Five and 6 let their opposing end and tackle come through, then block them to the outside; 7 teams with 3 on the right guard; the center, after snapping the ball pulls around 7 and drives for the right backer-up; 9 and 10 team on the defensive left guard; 11 brushes the defensive left tackle and goes for the left-side backer-up; the ball is snapped on a slant to 2 who follows 1 off tackle; 4 fakes to the right.

Colorado

In Diagram 84, 5 blocks the defensive



GAMES ARE WON ON THE COURT

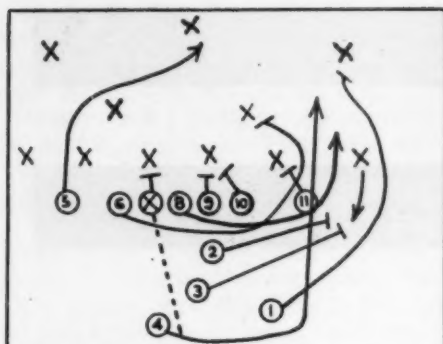


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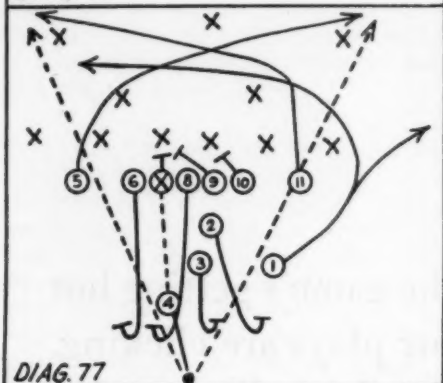
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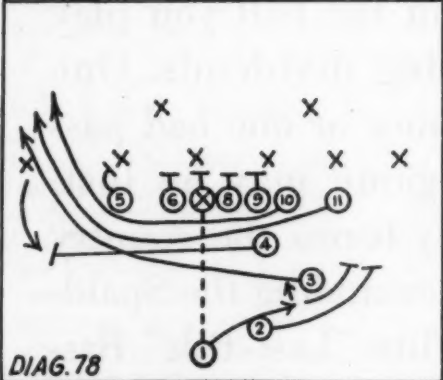
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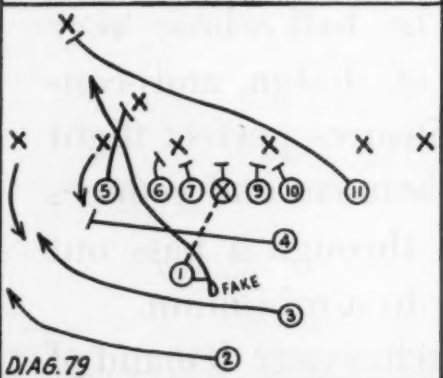
DIAG. 76



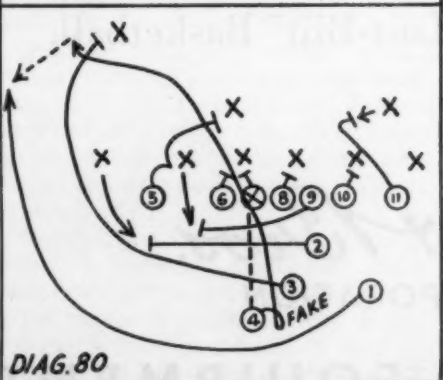
DIAG. 77



DIAG. 78



DIAG. 79



DIAG. 80

right tackle; the center takes the defensive right guard; 10 and 11 take the defensive left guard and tackle; 9 cuts through the line and drives for the weak-side line-backer; 6 and 8 pull out to form interference with 4; 8 is on the inside and cuts toward the strong-side backer-up; 6 goes for the left halfback; 1 helps 11 on the defensive left tackle; 2 comes across to take the left end; the ball is snapped to 3 who runs as indicated.

In Diagram 85 we have an inside tackle play from the Notre Dame Z formation; the line is balanced with the ends split away a yard and a half; 5 drives through for the right halfback; 6 and 7 take the right tackle and guard; the center goes through for the right backer-up; 9 pulls out and teams with 2 in trapping the left tackle; 10 and 11 team on the left guard; as the left end comes down he is pushed out of the play by 1; 4 gets the ball and cuts inside tackle as 3 drives through ahead of him to take the strong-side line-backer.

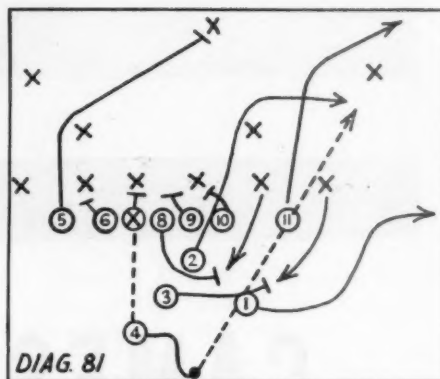
In Diagram 86 we have a center smash from the short punt formation; 5 goes down for the right halfback; 6 steps to his left and blocks the defensive right tackle; 7 steps aside permitting the right guard to come through and then goes down for the right-side backer-up; the center and 9 team on the left guard; 10 goes through for the left backer-up; 11 steps over and blocks the defensive left tackle; 1 comes across fast and traps the right guard; the ball is snapped to 2 who spins and fakes to 3; then hands the ball to 4 who drives straight ahead; 3 continues on and blocks the right end.

Diagram 87 is a weak-side reverse; the line is unbalanced and the backs are in a tandem formation; 5 goes through for the weak-side backer-up; 6 teams with the center on the defensive right guard; 8 pulls out and aids 2 in teaming on the right tackle; 9 and 10 work on the left guard; 11 takes the defensive left tackle; 4 goes across to block the right end; the ball is snapped to 3 who spins and hands it to 1; 1 drives inside tackle.

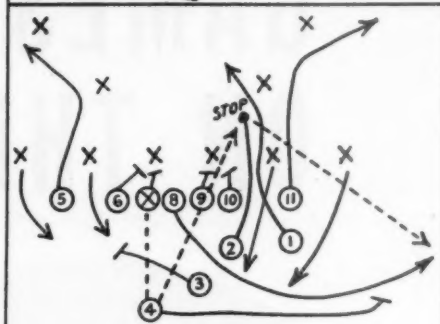
Diagram 88 is a forward pass from a single wing-back formation, unbalanced line. Five charges down the field to get behind the defensive right halfback; 6 steps back and blocks the right tackle as he comes through; the center blocks the right guard; 8 pulls out and comes back to help 2 handle the defensive left end; 10 steps back to catch the left tackle as he comes through; 11 drives to get beyond the safety man; 1 cuts out to draw the left halfback out of the play; 3 cuts over the line of scrimmage and bears into the flat; 4 receives the snap from center and passes to either 3 or 11.

Connecticut

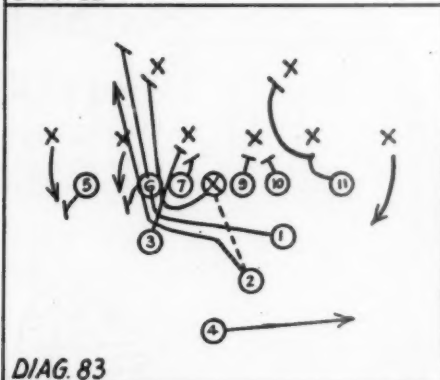
Diagram 89 is a spin inside tackle with a mouse-trap on the guard. Five goes



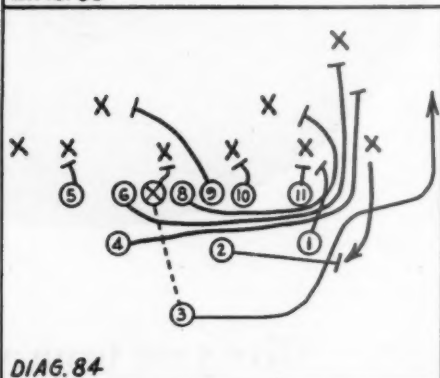
DIAG. 81



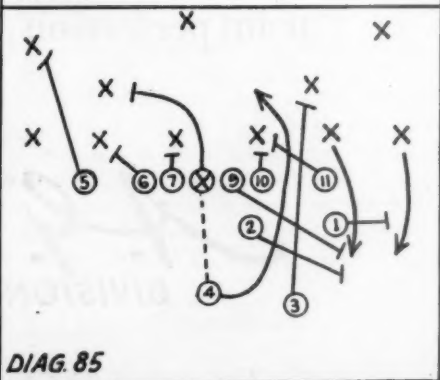
DIAG. 82



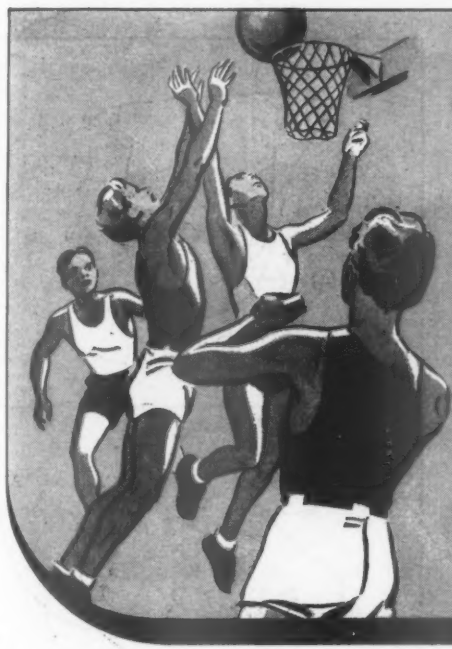
DIAG. 83



DIAG. 84



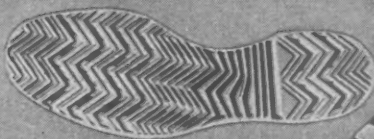
DIAG. 85



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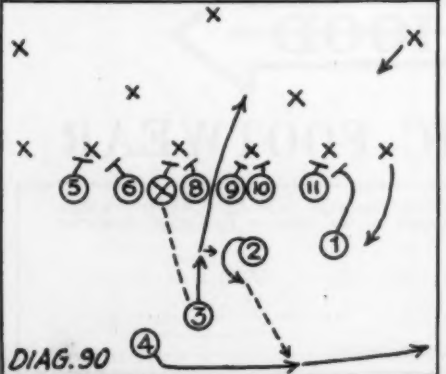
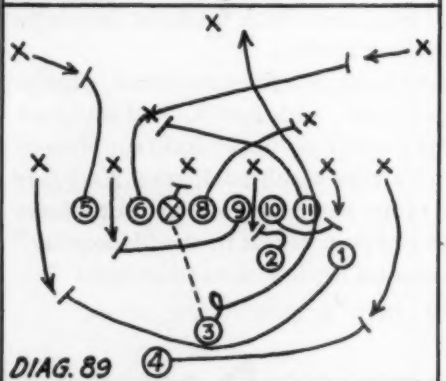
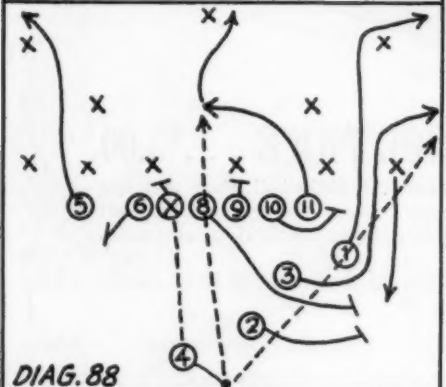
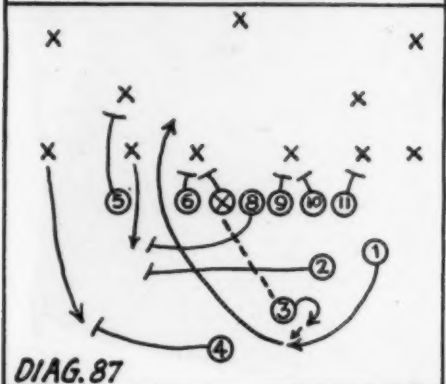
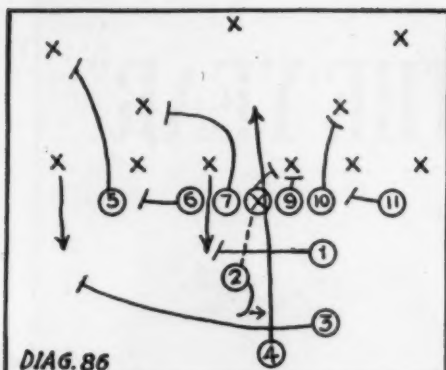
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down to block the right halfback; 6 goes across to block the left halfback; the center blocks the right guard; 9 pulls out and takes the right tackle; 10 takes the left tackle; 11 drives for the weak-side backer-up; 2 gets a nice angle block on the left guard; the ball is passed to 3 who spins, faking first to 4, then to 1 and drives inside tackle; 1 and 4 continue on and block the opposing ends.

Diagram 90 is a fake buck with a lateral which is used deep in scoring territory. Five and 6 team on the defensive right tackle; the center and 8 team on the guard; 9 and 10 team on the defensive left guard; 11 helps 1 on the left tackle; the ball is passed to 3 who bucks straight ahead, giving the ball on a lateral hand-pass to 2; 2 has pivoted and receives the ball with his back to the line of scrimmage; 2 then laterals to 4 who is running at full speed for the corner of field. The left end and left halfback have been sucked in by the fake buck.

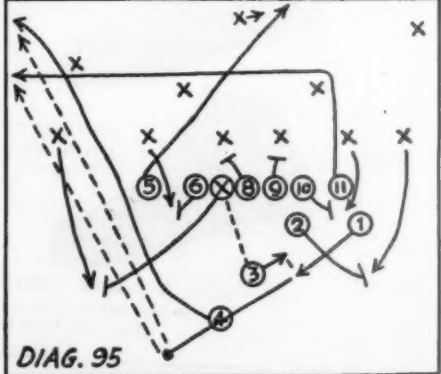
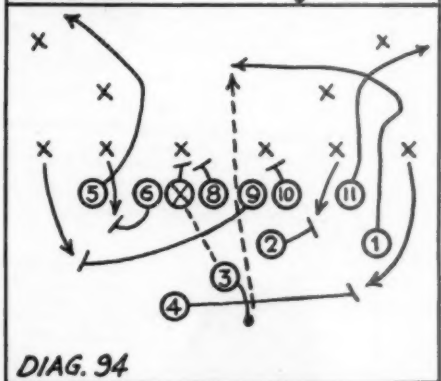
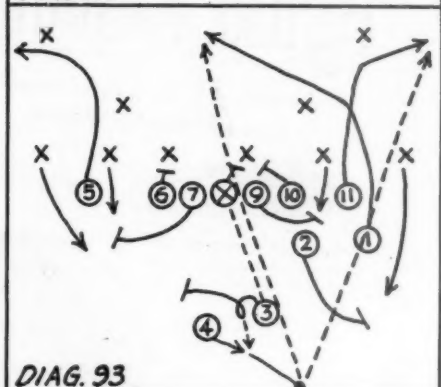
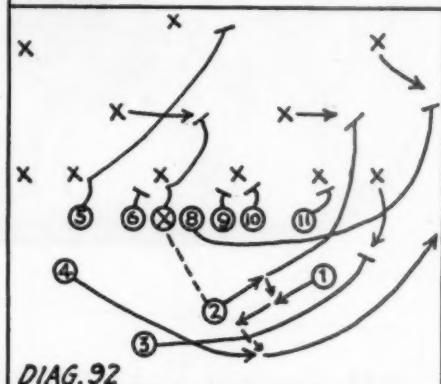
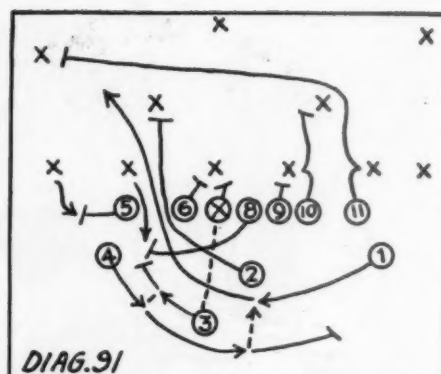
Kentucky

Diagram 91 is a double reverse inside the weak-side tackle with a trap on the tackle. Five goes to his left and blocks the opposing end; 6 and the center team on the defensive right guard; 8 pulls out and mousetraps the right tackle; 9 takes the left guard; 10 helps 9 by brushing the left guard, then drives for the strong-side backer-up; 11 brushes the left tackle, then diagonals across the secondary for the defensive right halfback; 2 drives through for the weak-side backer-up; the ball is passed to 3 who gives it to 4 who in turn gives it to 1; 3 then helps 8 with the right tackle; 4 protects from the right side.

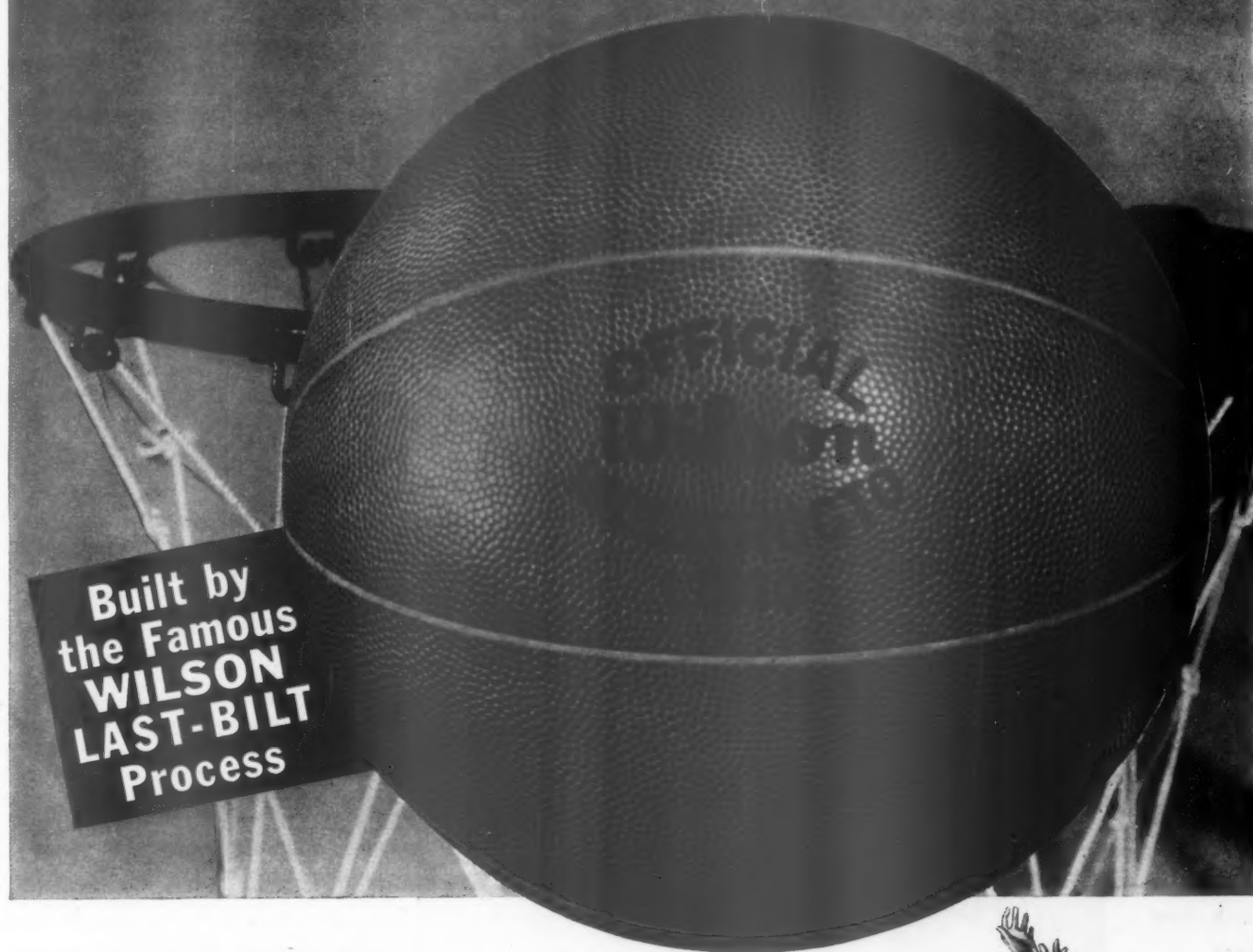
Diagram 92 is a double reverse to the strong side. Five brushes the right tackle and drives for the safety man; 6 blocks the right guard; the center helps 6 with the right guard, then goes for the weak-side backer-up; 8 pulls out and leads the interference around the end assigned to blocking out the left halfback; 9 and 10 team on the left guard; 11 blocks the defensive left tackle; 3 comes across for the left end; the ball is passed to 2 who charges forward, then hands the ball to 1 who, in turn, gives it to 4 who runs wide around the end; 2 cuts through for the strong-side backer-up.

Michigan

Diagram 93 is a pass play from the Notre Dame formation. Five runs at the right halfback, then cuts outside of him; 6 blocks the defensive right guard; 7 traps the right tackle with a nice angle block; the center and 10 team on the left guard; 9 traps the left tackle; 11 drives for the left halfback, then cuts outside of him; 1 crosses behind 11 and goes down the middle of the field; 2 comes back to protect against the defensive left end; the ball is



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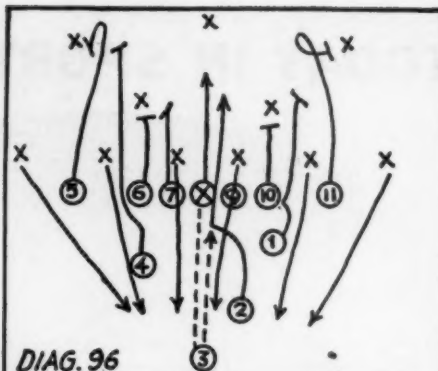
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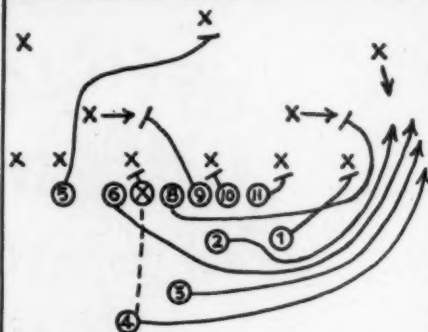
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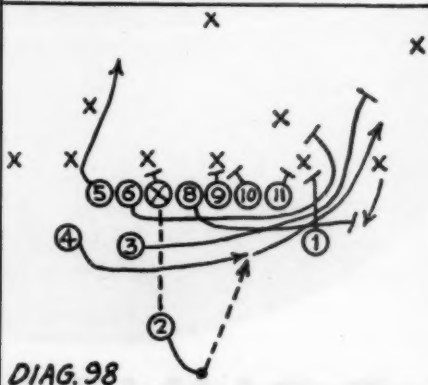
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DIAG. 96



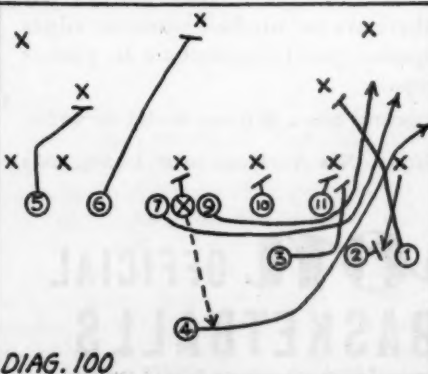
DIAG. 97



DIAG. 98



DIAG. 99



DIAG. 100

snapped to 3 who spins and hands it to 4; 3 protects 4 from the defensive right end; 4 fades back and passes to either 1 or 11.

New Hampshire

Diagram 94 is a pass play. Five runs to his right then cuts behind the defensive left halfback; 6 steps back then hits the right tackle; the center and 8 team on the right guard; 9 pulls out and blocks the defensive right end; 10 takes the defensive left guard; 11 goes down cutting inside the left halfback; 1 goes down, bears to his right, and cuts sharply to his left, running parallel to the line of scrimmage; 2 blocks the left tackle; 4 comes across to protect the passer from the defensive left end; the ball is snapped to 3 who fades and passes to 1.

Diagram 95 is a reverse pass that works well as a side-line pass. Five runs in front of the safety man to draw him out of the play; 6 takes the defensive right tackle; the center pulls out and takes the defensive right end; 8 and 9 take the two guards; 10 blocks the left tackle; 11 runs straight at the left halfback and then cuts across the secondary; 2 comes down and blocks the defensive left end; 4 goes out beyond the defensive right halfback; the ball is snapped to 3 who runs forward, gives it to 1 who comes back as in a deep reverse and then shoots a pass to either 11 or 4; after handing the ball to 1, 3 helps 10 with the left tackle.

Diagram 96 is a fake punt play. The two ends 5 and 11 go down with the snap of the ball and then cut back to take out the two halfbacks; the linemen let the defensive linemen sift through; the ball is snapped to 3 who fakes a kick and shoots a pass to 2 who has moved up in position a yard back of the center; when 2 receives the pass he shouts "go" and the linemen block; 6 and 7 on the right-side backer-up, 9 and 10 on the left line-backer; 1 and 4 go down to help their two ends with the halfbacks; the center drives for the safety man.

Maryland

In Diagram 97 we have an end run from the single wing. Five goes down for the safety man; 6 and 8 pull out of the line to form interference, 8 driving for the strong-side backer-up; the center takes the right guard; 9 goes through for the weak-side backer-up; 10 and 11 take the left guard and tackle; 1 takes the defensive left end; 2 and 3 join the two guards in forming the interference; the ball is snapped to 4 who runs wide before cutting behind his interference.

Diagram 98 is a screen pass from the double-wing formation. Five checks the right tackle then goes down as though expecting a pass; 6 pulls out and comes around driving for the strong-side backer-up; 8 pulls out and blocks the left end



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Coach of Minnesota's Golden Gophers

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BIERMAN: I'm in favor of a big breakfast for my boys—a breakfast with plenty of food-energy and satisfaction like that "Breakfast of Champions."

YOU: Exactly *what* is this "Breakfast of Champions" dish that you and so many other coaches recommend?

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YOU: It looks like this "Breakfast of Champions" takes care of both sides of this training problem. How can I fit this breakfast into the training diet of my boys?

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Tell your players that this "Breakfast of Champions" is a regular favorite with probably *more* champions of sport than any other dish of its kind!

Tell them that those crunchy Wheaties flakes help make training *fun*, with a combination of zippy flavor and appetite-rousing goodness that delivers real satisfaction!

Tell them that this breakfast of Wheaties, milk and fruit provides a big supply of nourishment. Abundant food-energy, the largest single need in an athlete's diet! The minerals, calcium, phosphorus and iron! Good body-building proteins! And Vitamins A, B, C and G!

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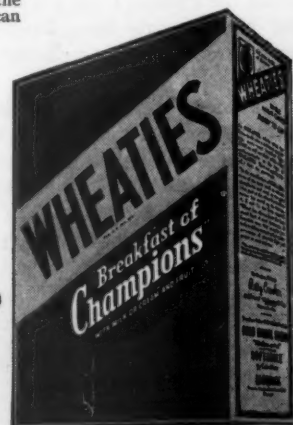
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"Breakfast of Champions"

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out; the center takes the right guard; 9 and 10 team on the left guard; 11 and 1 team on the left tackle blocking him in; 3 leads the play; the ball is snapped to 2 who fades several steps and shovel-passes to 4 who goes off tackle.

Montana

In Diagram 99 we have a pass play from an unbalanced line and a short punt set-up in the backfield. Five checks the right

halfback, then diagonals across the secondary; 11 brushes the left halfback and turns to his right; 6 blocks the right tackle; 8 pulls out of the line to take the right end; the center takes the right guard; 10 takes the left guard; 9 pulls out to stop the left end as 3 moves up to stop the left tackle; 1 runs into the flat on his side; 2 counts two, then goes outside tackle and veers into the flat zone for a pass from 4 who has faded back after receiving the snap from center.

New Mexico

In Diagram 100 we have a run from a spread formation with a balanced line. Five goes for the line-backer on the right side; 6 goes down for the safety; the center takes the defensive right guard; 10 takes the defensive left guard; 11 and 3 team on the left tackle; 1 brushes the left end and goes for the backer-up; 2 blocks out the end; 7 and 9 pull out and lead the interference; the ball is snapped to 4 who follows his interference outside tackle.



Football's Most Unpopular Play— the Safety

Wilbur E. Stocum

Boys' Technical High, Milwaukee

THE safety is one of football's most unpopular plays. The method of putting the ball in play has far out-moded the other "openings-up" of the game. My proposal would be that whenever points are scored, the ball be put in play in the same manner, namely the kick-off with all rules governing the play the same as when a touchdown has been scored or a field-goal made.

The rules committees have done many things to organize the game and have its mechanics generally understood. Players, spectators, and officials are familiar with the rules of the kick-off and there is little confusion with the operation of these rules during the game. Everybody understands that when points have been scored, the team scored upon has a chance to get those points back.

The safety is one of those plays in which points are scored by the play of the game. Some plays from the automatic safety are a pure gift to the team on defense. The rules have done a few things to help the teams play a safer game such as the side line zone and moving the ball away from the goal posts. I would like to see the depressing effect of the safety also removed.

How would this proposal affect the rules? Well, look up Rule Seven and the

approved rulings, and after study you will find that the term free kick will only apply to the fair catch. Fewer rules and approvals would be needed.

How would this proposal affect the coach? My observation has been, that nothing upsets a team more than the scoring of a safety. The duplication of the kick-off play when moved to the 20-yard

line, the fact that the opponents have been awarded two points, and that *they must kick off* to the team that was awarded the safety are contrary to game conditions, as when other points are scored. I have never seen a team come back and play after a safety has been scored upon them as they do, when they have been scored upon by a touchdown or a field goal. The on-side kick possibilities of the play of the kick-off are too dangerous in that position of the field. In 1928 the safety was moved up to the 30-yard line, but was returned to the 20 in 1929. Now with more liberal pass rules and lateral rulings that give the team in possession more threats, the team with a safety against it is decidedly in the hole.

How would this proposal affect the players? Well, I believe that the simplification of the rules from the duplication of the parts of the game is what we have in baseball and basket ball and the boys seem to feel that they are working on a fairer basis. As it is today they must reflect on past happenings or try to remember what had been practiced or told to them. I don't know many coaches that encourage the play of the safety.

How would this proposal affect officiating? A smoother game, and better rule coverings.

The greatest effect I believe would be on the spectators of the game. It is not a frequent play and putting the ball in play the same way as at any other time that points are scored would bring in a fairness that is lacking today. The effect of the "smart stuff" that might result from gift safeties would off-set the perfect play of

FROM time to time the "Coaches Confab" Column is run with the hopes on the part of the editor, that coaches will pass on their ideas to their colleagues, and that the suggestions made in these columns will bring forth replies from other coaches who have opinions different from those expressed in these columns. At present, we have requests for answers to the following questions. The readers of this publication are invited to send in their comments.

1. If you have a strong basketball team of veterans, should you have a great number of hard games before a tournament or a limited number?

2. One of the biggest problems that I have is individual strife among players. I would like to have someone tell how this may be overcome.

3. Should a boy's style of goal shooting be changed from the unorthodox, although his shooting now is average in accuracy?

4. Is it a general practice among high school coaches to work very extensively on set plays?

5. I would like some comments or an article on the psychology of coaching.

6. Type of zone defense to use in a basketball court 90' by 43'.



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the field goal, which the defense has no chance to stop. I sincerely hope that changes are possible to be made without the public universally demanding it, and making it look as though our rules com-

mittee has seriously erred in the equalities of the game.

Is the Notre Dame System Weak on End Runs?

The theory of the Notre Dame coaches

is that the strength of the system is *first outside* as compared with the Warner system which concentrates on the inside.

Their backfield is placed so that it can strike the outside in a hurry.

Some Points to Remember

By Meyer Morton

Official, Western Intercollegiate Conference

1. On a free kick following a fair catch or safety the kick may be a punt.

2. On a kick-off the kick cannot be a punt but must either be a place kick or a drop kick.

3. A kick-off or kick after safety may be made from any point on or behind the kicking team's restraining line, (even within 15 yards of the side lines).

4. A free kick after a fair catch must be made from the mark of the catch or some point directly behind it, but if the mark of the catch is within 15 yards of the side line the ball must be moved in 15 yards from the side line and the kick made from that point or some point directly behind it.

5. If a kick-off goes out of bounds between the goal lines, either before or after crossing the receiving team's restraining line, it is not kicked over but goes to the receiving team at a point 15 yards in from where it crossed the side line or *anywhere* on the 35-yard line.

6. If a free kick other than kick-off goes out of bounds either before or after crossing the receiving team's restraining line, it is not kicked over but goes to the receiving team at a point 15 yards in from where the ball crossed the side line, in the same manner as a kick from scrimmage.

7. After a touchback the ball may be put in play *anywhere* on the 20-yard line (even within 15 yards of the side line).

8. After a safety the ball may be put in play *anywhere* on the 20-yard line *not less than 15 yards from the side line* or any point back of the 20-yard line *not less than 15 yards of the side line*.

9. On any kicked ball the touching or *illegal* recovery of the ball by a player of the kicking team does not automatically make the ball dead, even if such player actually falls on the ball. However, if such recovery be legal the ball is automatically dead. The recovery may be illegal on a kick-off, kick after a fair catch or kick after a safety by a player of the kicking team going out of bounds and recovering it before it passes into the actual possession and control of an opponent. *Exception:* On a kick from scrimmage which does not cross the line of scrimmage, either team may legally recover and advance the ball.

10. A player of the kicking team who goes out of bounds on a kick-off is ineligible to recover the ball unless and until it passes into the *actual possession and con-*

trol of an opponent. The penalty is loss of the ball at the point of the foul.

11. A player of the passing team who goes out of bounds on a forward pass play is ineligible to recover the ball unless and until it *touches or is touched by an opponent. The penalty is 15 yards from the point where the ball was put in play and loss of down.*

12. The kicking team can never advance the ball after a kick, no matter how the players acquire possession of it, *unless the kick for any reason does not cross the line of scrimmage.* In that case the ball may be recovered and advanced either by the kicking team or, by the defensive team.

13. A forward pass caught simultaneously by two players of opposing teams goes to the *team making the pass.*

14. A fumbled ball going out of bounds which is touched simultaneously in the field of play by two opposing players goes to the *team which did not put the ball in play.*

15. The tackling of the maker of a fair catch is a foul even if he is not thrown to the ground. The penalty for tackling the maker of a fair catch, for throwing the maker of a fair catch to the ground, or for interference with opportunity for a fair catch is *15 yards and the fair catch is allowed.*

16. The making of an invalid signal for a fair catch is considered unsportsmanlike conduct and the penalty is 15 yards and is enforced *from the point where the ball was last put in play.* This means that it is the kicking team's ball, 15 yards in advance of the point where the ball was put in play and the ensuing down is first down. Rule 10, Section 2, Article 7, Penalty.

17. A foul can never result in the allowance of a touchdown. However, there are plays in which, if a touchdown is made and a foul is committed by a player of the team making the touchdown, the touchdown may nevertheless stand.

18. The determining factor in differentiating between a "safety" and a "touchback" is *"the impetus which caused the ball to go behind the goal line."*

19. On a forward pass play, ineligible players are not allowed to advance beyond the line of scrimmage before the pass is made. *If they do so it is interference.*

20. Interference on a forward pass, as to the offense, is timed from the *snapping*

of the ball; as to the defense, it is timed from when the pass is actually made.

21. On an illegal forward pass the ball is dead when *caught* by a player of the opposing team. There are three classes of illegal forward passes, viz:

- (a) Pass made less than 5 yards behind the line of scrimmage;
- (b) Forward pass by team not putting the ball in play;
- (c) More than one forward pass during a scrimmage.

22. On a forward pass play when the ball touches or is touched by an originally ineligible player or by a second originally eligible player, the ball is dead when it *touches or is touched* by such player.

In any of the above cases, the ball cannot be played after it becomes dead.

23. A foul committed on a player *with the ball* out of bounds is penalized from the spot *where such player crossed the side line.*

24. A foul committed on a player *without the ball* out of bounds is penalized *from the spot of the foul.*

25. On a play in which one team commits a disqualification foul and the other team commits a foul not penalized by disqualification—

- (a) Disqualified player must leave the game;
- (b) Enforce the penalty for the disqualification from the *spot of the preceding down;*
- (c) Play the down over unless the enforcement of the distance penalty leaves the ball in advance of the point necessary to be gained for first down.

26. If a foul is committed when the ball is out of bounds in possession of neither team and (1) *before it is declared dead*, the penalty is loss of ball at the point of the foul. (2) If committed *after the ball has been declared dead*, possession is determined in accordance with the time the ball is declared dead, and the penalty is enforced from the point of the foul.

Illustration: (1) A punts out of bounds and before the whistle is blown B commits foul. It is A's ball at point of foul.

(2) A punts out of bounds. Referee blows the whistle and declares the ball dead. B commits foul. B's ball and penalty enforced from spot of foul.

27. (a) If both teams commit disqualifying fouls when the ball is *not*

put in play, the down is not played over. The disqualified players must leave the game. There is no distance penalty.

- (b) If both teams commit disqualifying fouls when the ball is in play, the down is played over. The disqualified players must leave the game. There is no distance penalty.
- (c) On a forward pass play a disqualifying foul committed by the defense is penalized from the spot of the foul.

28. On incompleting forward passes where fouls are committed:

- (a) by the passing team:

1. Before the pass is incomplete, enforce from the spot of the foul unless ruled as interference.

2. After the pass is incomplete, enforce from the spot where the ball will next be put in play.

3. Fouls such as off-side, illegal shift, etc., enforce from where ball was put in play.

- (b) By the defensive team:

1. Before the pass is thrown, regardless of where foul is committed, enforce from the point where the ball was put in play.

2. While the pass is in the air beyond the scrimmage line, enforce from the spot of the foul, otherwise from where the ball was put in play.

3. After the pass is incomplete, enforce from the spot where the ball is next to be put in play.

4. Disqualifying fouls, regardless of time or location, enforce from the spot of the foul.

5. Offside, etc., enforce from spot where ball was put in play.

29. Running into the kicker, roughing the kicker or flagrant roughing of the kicker behind his goal line is not a touch-back. The penalty is enforced from the spot where the ball was put in play.

30. Under the new rules on kick-offs out of bounds the following is to be noted:

- (a) If the ball goes out of bounds between the goal lines the defensive team has the option of taking the ball at a point 15 yards in from where it crossed the side line or putting it in play anywhere on their 35-yard line.

(1) If a foul is committed which constitutes a violation of the kick-off formation such as offside, etc., the penalty is enforced from the spot where the ball is put in play after the kick-off.

(2) If a foul is committed by either team after the ball has gone out of bounds, the penalty is enforced from the spot of the succeeding play.

(3) If a foul is committed by either team while the ball is still within the boundary lines, the pen-

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alty is enforced from the spot of the foul.

(4) If fouls are committed by both teams (a) while the ball is in the air between the side lines; and (b) one being while ball is between the side lines and the other either on the kick-off formation or after ball goes out of bounds, the fouls offset each other, the ball is put in play as though no foul had been committed and the play is not played over.

(5) If one of the fouls is a disqualification foul, it is not offset by the distance penalty, on the minor foul and the disqualification penalty is enforced from the spot of the succeeding play.

(6) If both fouls are disqualification fouls, the disqualified players leave the game, no distance penalty is enforced and the ball is not played over.

(b) If the ball crosses the goal line and then goes out of bounds back of the goal line, it is either a touchback or a safety (Rule 9 governs).

(1) If there is a violation of the kick-off formation by either team, the ball is kicked over.

(2) If there are fouls by both teams before the ball goes out of bounds, the ball is kicked over.

(3) If there are fouls by both teams after the ball goes out of bounds, the fouls offset each other and the ball is put in play as though the fouls had not been committed.

(4) In all other cases of fouls, the provisions with reference to a kick-off going out of bounds between the goal lines govern.

31. If on a kick from scrimmage which has crossed the line of scrimmage, the ball is touched by a player of the kicker's team and there is a personal foul by Team B—

(a) *Before Team A player touches the ball*, the fouls offset each other and the down is played over;

(b) If B's personal foul occurs *after A has touched the ball*, Team A has the option of declining the penalty or leaving the ball in B's possession where the A player touched it.

32. If an ineligible player touches or is touched by a forward pass in the field of play or end zone, it is a foul, the ball becomes dead, the penalty is 15 yards from the spot of the preceding down and loss of down and it *may not be declined*. If it occurs behind the goal line on fourth down it is a touchback. There is no option.

However, if on a forward pass play the passing team commits interference behind the defensive team's goal line, the defens-

ive team has the option of taking a touchback or the penalty, which is 15 yards from the point of the preceding down and loss of down.

33. If time expires on the last play of a period and Team A on such play interferes with the opponent's opportunity for a fair catch, penalize Team A 15 yards and allow the fair catch and allow Team B to make the free kick only, but time does not expire until the ball is declared dead following such a free kick.

34. The following penalties on fouls committed by the defense do not automatically give Team A a first down:

(a) Offside by defense.

(b) Encroachment on neutral zone by defense.

(c) Illegal delay of game.

(d) More than three times out.

However, if the enforcement of the distance penalty leaves the ball in advance of the point necessary to be gained by Team A for first down, then the ensuing down is first down.

35. The following fouls are penalized by 15 yards and loss of a down:

(a) An originally ineligible player touching or being touched by a forward pass.

(b) Intentional grounding of a forward pass.

(c) Interference by offensive team on a forward pass.

Building an Indoor Track

By Harry Hillman
Track Coach, Dartmouth College

THERE has been plenty of controversy about running tracks and whether some indoor tracks are faster than outdoor tracks. At Dartmouth College several years ago, we built a track that just happened to turn out to be probably the fastest indoor track in the world. On this track Glenn Cunningham ran the mile in 4.04.4, which is the fastest mile run in history. John Borican ran an 880 yard in 1.49.8, the fastest half mile ever run indoors, and he should have done better than 1.48 had he not been fooled by the track. The Fordham mile relay team did 3.15.4 establishing a new indoor record. Both Cunningham and Borican could have bettered these figures had they known the track. Cunningham did 58.5 for the first 440 and this frightened him, so he let down in the second 440, doing 64 seconds, although he could have done 62 seconds without much more effort; then he got going again doing 61.7 for the third 440 and 60.2 for the final 440. Cunningham could have beaten 4.02 had he kept on going. Borican for his first 440 in the 880 yards, did 52.4 then slowed down enough to lose valuable time. Both Cunningham and Borican finished very strong in their respective races, and both mod-

estly stated after their races that they could have done better. Had the Fordham relay team made better passes in their baton exchange they could have taken two seconds off their performance.

Why is the track so fast? Well I will tell you. It fooled us for several years. Our track performers would make exceptional times in practice, and when they ran their races on the Boston or New York Garden tracks, they would slow up considerably and look like average college runners or relay teams. We could not figure it out at first and thought that when our boys from this northern country arrived in the big city they "folded up." We had a miler who did 4.17 on this track of ours and finished very fresh. The next week he competed at the Boston Garden in the Indoor Quadrangular Meet, comprising Harvard, Cornell, Yale and Dartmouth and, although he won the mile event in 4.23, he was rather tired at the end. He did just six seconds slower and ran his head off. Right then and there we were convinced that our track was really a fast one. We then arranged to have Cunningham come up for a mile spin as stated above.

When our gymnasium or field house was

built, we had a cinder track on the ground floor and built a twelve-lap board track in the gallery. This upstairs track was a bit dangerous, as the turns were sharp and we were always afraid someone would fall off the track. We used this track for about ten years and then decided to have other facilities. We thought of building a board track out of doors, but these New Hampshire winters are pretty cold and, after several consultations, we decided to build a portable track over our cinder track, removing it after the indoor season.

No one seemed to know just how to build such a track under the conditions, but we obtained plans of an outdoor board track built by Massachusetts Institute of Technology in Cambridge and followed their plans to some degree. Our superintendent of buildings, who is an engineer, and a member of the faculty of our Engineering School co-operated with me in developing plans, which finally produced good results.

The Dartmouth gymnasium consists of two wings joined by two tunnels. The areas on the outside of the baseball and basketball space in one wing and the same area in the other wing, where the vaulting, jumps and weight events are prac-

ticed, were utilized, and in surveying these spaces, we found that a suitable track could be constructed, although it would not be an even distance.

It was thought that planks 1 and 1/2 inches in thickness would be suitable so these were used. The straightaways were built with the planks laid end to end and for the banks they were laid side by side. We intended to make the banks with a three-foot pitch, but forgot that the cinder track had a one-foot pitch and found we finally had a four-foot pitch which is quite steep for a track nine feet wide. This mistake, however, with other factors, probably made the track fast.

By hoisting two sections of the track on pulleys and substituting a flat surface we have a 100-yard straightaway with a 20-yard finish. The track is built on 2x4's, with the four-inch surface on the ground. These bases are spaced fifteen inches apart which, the engineers claim, helps make the track fast. The track is 6.73 laps to the mile with straightaways 82 yards long and the turns 49 yards in circumference. Since there is no wind to hinder the runners and since the temperature is around 60 degrees in the winter, ideal conditions exist. If the building could be heated to around 70 degrees it might be of further help to the runners in making record performances.

We know that the track is fast in circular races but we are not too sure about straightaway performances. I will say this, however, that a schoolboy in one of our interscholastic meets equalled the indoor record for the 60-yard high hurdle. We might try to stage a 100-yard dash this winter if we can find a few sprinters who are going good at the time. I think that a top-notch sprinter in good condition would come close to 9.6 for the century. I might add here that in the 100-yard distance there are three lanes, while in the 60-yard and under there are five lanes.

The writer, during his athletic career, probably ran on almost every indoor track in the country. In those days few tracks were banked and it was necessary to run on flat armory floors. The fastest of these was undoubtedly the 74th Regiment Armory at Buffalo, New York. The old Garden track in New York and the old Mechanics Pavilion in Boston were slow, compared to the present Garden tracks in both Boston and New York. These tracks are eleven laps to the mile and are laid on concrete, hence they cannot compare with the Dartmouth track.

I am beginning to think that if a 440-yard indoor board track could be built along the same lines as the Dartmouth track, it would be the fastest track in the world either outdoors or indoor. I think the fastest outdoor track the writer has seen to date is the track at Los Angeles where the Olympic Games of 1932 were held.



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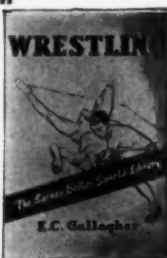
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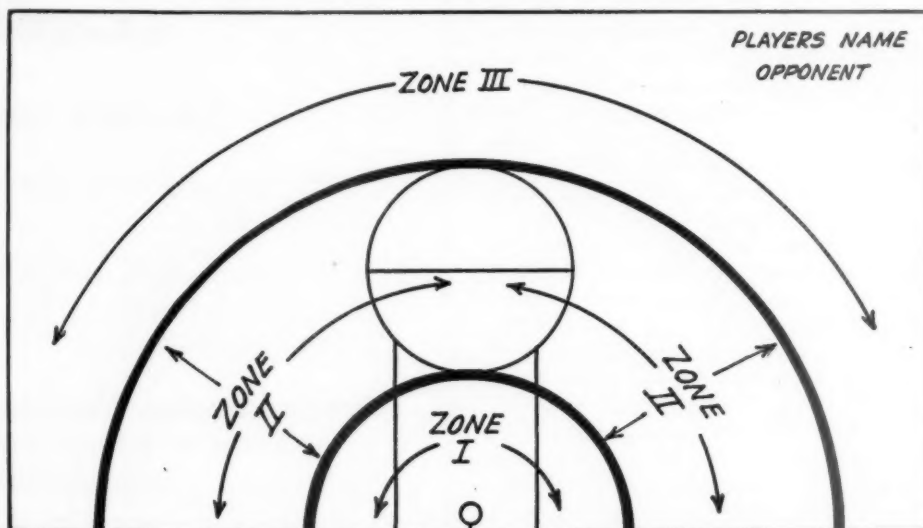
There has been some criticism of our holding these "Special Feature" affairs as several indoor promoters are claiming that we are taking the glamour away from the big indoor meets. We question this, inasmuch as an athlete can run just as fast as the track conditions warrant, and in the old days the spirited races held on much slower tracks drew the same crowds as the present day indoor meets.

At Dartmouth these "Feature Nights" are not run for any financial gain as we can take care of only 1,500 people who pay a small fee of fifty cents. In the two meets held our finances are several hundred dollars in arrears, but we are holding the events in the interest of sports and to give the athletes who are going good at the time a chance to better existing records.

Hitting Averages in Basketball

By Alfred T. Gipple

Hershey Industrial School, Hershey, Pennsylvania



THE value of batting averages in baseball is appreciated by all baseball men because of its reliability in evaluating the offensive ability of a baseball player. Why cannot we, the basketball coaches, have a similar system for measuring the offensive abilities of our basketball players? Surely, we have few enough scientific methods for accurately judging our players. Most of that judgment is subjective and not objective. In other words, the average coach cannot produce any facts or figures that will justify his preference of players.

In baseball it is universally accepted that a .300 hitter is a good batter. In all of my reading I have never seen a figure that would accurately tell whether or not a basketball player is a good shooter. Many coaches keep shooting records or shot charts of their players during actual competition. But we have as many ideas

on this as there are coaches. Could we not devise a chart that would be generally accepted, scored and averaged by an identical system. I believe that we can.

Here is a suggestion, but some of you coaches can in all probability improve upon it. If so, let us have your suggestions. The accompanying chart divides the offensive floor into three divisions; no matter how small or large the floor may be, this chart may be used. The reason for the three divisions is apparent because of the difference in technique, skill and eye and muscle co-ordination at the various distances from the basket. We might divide the floor into smaller sections to take care of angle or bank shots as many coaches prefer the bank shot from certain angles, but we want this system as simplified as possible. A separate chart for each player may be used. During the game someone, managers, pupils, or second

	SECTION I			SECTION II			SECTION III			ENTIRE FL.		
Name	taken	made	ave.	taken	made	ave.	taken	made	ave.	taken	made	ave.
Player A	6	3	.500	3	0	.000	6	1	.166	15	4	.266
Player B	5	1	.200	4	2	.500	4	1	.250	13	4	.307
Player C	8	3	.375	1	0	.000	0	0	.000	9	3	.333
Player D	2	1	.500	4	0	.000	8	2	.250	14	3	.213
Player E	3	1	.333	5	2	.400	2	0	.000	10	3	.300
Player F	2	0	.000	0	0	.000	0	0	.000	2	0	.000
Player G	3	2	.666	3	0	.000	1	1	1.000	7	3	.428
Total	29	11	.379	20	4	.200	21	5	.238	70	20	.280

string players should use the accepted dot and circle method. That is, the position on the floor from which a player takes a shot should be indicated on the chart with a dot (.); if he makes the shot encircle the dot (⊙). At the end of each contest a reliable person should average each player's and the entire team's shooting ability in each of the three divisions of the floor and for the entire floor. In averaging the same system that is used in baseball should be used. That is, divide the amount of shots taken into one thousand times the number of shots made.

This procedure may be followed for the entire season. At the end of the season your results may be sent to some central point such as the ATHLETIC JOURNAL. If enough coaches respond, the results will certainly give us some definite figures upon which to judge our players in the future. We will be able, not only to compare our own players with each other, but will know how they compare with the accepted standards.

Probably some coaches will consider this too much trouble to justify the results. I am sure, however, that you will discover as I have discovered in using this system for the past five years that any reliable student manager can handle the entire task.

In summarizing there are two main results that such a survey would produce in addition to the valuable knowledge that each coach would gain concerning his own players.

1. What is considered a good hitting average for: (a) short shots; (b) intermediate shots; (c) long shots; (d) the entire floor.

2. What is the average number of shots your team should get in the course of a game?

Some Offensive and Defensive Football Systems

(Continued from page 11)

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This system is probably the most popular type of offense in use throughout the country today. It is not as hard to teach as the Notre Dame. Most of the coaches prefer it for that reason, and for the reason that it is characterized as the most powerful formation for plays off-tackle. There are many variations of this offense. The most popular seems to be with the end on the strong side in tight. The end on the weak side is split away one yard. The backfield is placed behind an unbalanced line in such a way as to give tremendous power on line plunges anywhere between the tackles, as well as off-tackle on the strong side.

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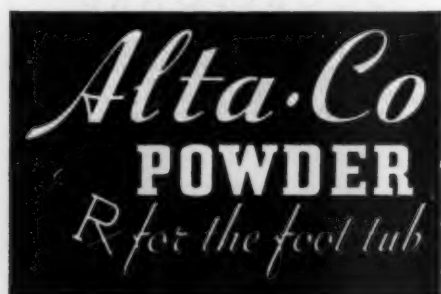
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Strong Points of the System

The unbalanced line. This type of line play gives a great amount of strength and protection to the strong side. It enables the offense to place two men against one defensive man all along the line. Teams that have powerful driving backs find this system extremely useful. There is fairly good protection to the forward passer. Two backs are so placed that they can get into the secondary very fast. The men on the short side can be used in the interference. When the guards pull out there is good cross-checking.

Many coaches prefer the unbalanced line because much of the burden of blocking is taken off the center. Many centers are unable to pass and then follow up with a good block. On off-tackle plays to the strong side, if a guard is used in the interference there is good cross-blocking.

Tight line on the strong side. This arrangement of the offensive linemen gives a tremendous amount of massed power. At the same time it will contract the defensive line making it easier to go around the defensive ends. As a general rule this will enable the offensive line to contact the defense more quickly.

Location of the backs. The usual location of the backs is in a tandem formation. This gives the formation a lot of smashing power between the defensive ends. The wing-back on the strong side is in an ideal position to help the end block the defensive tackle. The wing-back is also in an excellent position to get out quickly into the secondary for a pass. This set-up in the backfield is also fine for spinners, fake spinners, and reverses. The forward passing attack is strong because of the fact that four receivers can get away into the secondary very quickly. The backs are in good position for quick kicking.

Weak Points of the System

Unbalanced line. The guards cannot run to both sides—strong and weak. This forces the development of a tackle to run in the interference. The guard on the strong side usually leads all the plays outside of the center. The result is that the defensive line-backers can watch this guard and usually get a tip-off on the direction in which the play is going. The short-side protection is weak.

Tight line. The ends can be held in on forward passes by the defensive tackles. There is not so much of a burden placed upon the defensive tackles as in a split line. The defense has a small territory to defend. There is little chance for cross-charging and mousetrapping. There is no strength to the short side. As a result the defensive line will over-shift and this will place an added burden on the offense. This formation is weak for punting and making long passes. The plays are so designed to take care of those defensive play-

ers in the immediate vicinity of the attack. Consequently few long runs will likely result when the teams are evenly matched.

DEFENSE

Today many types of defenses are employed by teams during a game. In fact in one series of four downs it is not uncommon to watch a defensive team use four different defenses. As a result of these varied defenses many coaches are asking the Rules Committee to pass a rule that would limit a team to only three different types of defenses in one game. Requests are being made to limit the defense in some manner. There is no question but that the offense is being hampered under the present rules. The writer is convinced that a rule change that would help the game would be that of starting the second half where the play ended at the finish of the first half. Many teams start slowly and quite often a team will be down on the opponents goal line at the end of the half. At the beginning of the second half this will all be thrown out and the ball kicked off. Why should a team be penalized after working the ball down that far?

THE 6-2-2-1 DEFENSE

This defense is the most popular of all the types in use at the present writing. Nearly all college conferences and state high school leagues report that the great majority of the coaches in their respective territories favor this defense. It is probably the best all-around defense in use today.

The Strong Points

It is good for pass defense, whether the man-for-man, zone, or a combination is used. It is strong against the quick kick because one man is back in the safety position. It is strong against end runs, off-tackle plays, and inside tackle plays. The ends are able to rush the passer and punter. Many coaches use this defense as their fundamental type, and will then shift from it to other formations.

The Weak Points

Line bucks can be made through the line with success. The line-backers have to do most of the tackling. It is weak inside the defensive team's 20-yard line. It cannot stop the short-yardage gains. It is hard for the tackles to rush the passer.

THE 5-3-2-1 DEFENSE

This defense has grown in popularity very fast during the past few years. It is particularly popular in the southern part of the country where the forward passing game has been developed to such a high degree of success.

It is strong against line bucks because of the fact that all the linemen are smashing and down on four points playing territory defense. They are hard to take out for that reason. It is strong against a forward passing attack, and against laterals. All of the linemen are rushing the passer, and there are six players in the secondary to defend against the passes. It is good against the quick kick because one man is back in the safety position. It is strong against spinners, fake spinners, and reverses because all of the defensive linemen as well as the line-backers are playing territory.

The Weak Points

It is not strong against end runs because the ends are crashing. The line does not cover enough territory. It is weak down near the goal line against short-yardage thrusts. It is not strong against inside-tackle smashes because the line-backers are spread out too far from that point of attack.

THE 7-1-2-1 DEFENSE

This is the oldest defense in football. It is still used by many good coaches throughout the country.

The Strong Points

It is strong against the quick kick because a man is back in the safety position. It is strong for rushing the passer and punter. The defensive tackles can hold up the ends on passes, thereby weakening the effectiveness of the passing attack. It is strong against a running attack because of seven men on the defensive line.

The Weak Points

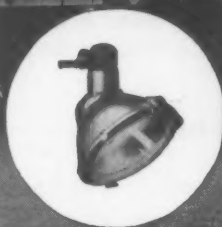
There is only one line-backer. Quick opening plays inside the defensive tackles go for good gains. It is weak against a well developed passing attack. This is especially true if the passes are thrown into the flat areas. The defensive center is required to come out of the line for pass defense, thus creating a weakness against quick passes into his zone. If the man-for-man assignment is used the offense will shoot their men into areas that are hard to cover. It is not strong on the goal line because of the one line-backer.

THE 6-3-2 DEFENSE

The Strong Points

This is a strong defense against off-tackle plays and end runs because the six linemen are crashing and are aided by three line-backers. It is good against short and flat forward passes. It is good against spinners, fake spinners, and reverses. It is particularly strong against the double

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wing-back formation if the defensive ends crash the wing-backs.

The Weak Points

It is not strong against the quick kick because there is no safety man. It is weak against long passes. It is weak on the goal line.

THE 7-2-2 DEFENSE

This defense was made famous by the late Knute Rockne.

The Strong Points

It is an excellent defense on the goal line because of the two line-backers and the seven men in the line. It is strong against a running attack. It is good against flat passes and laterals because the passer can be rushed and the ends can be held up.

The Weak Points

It is weak against the quick kick because of the fact there is no safety man. For the same reason it is weak against long passes. It is also weak against passes down the middle.

Football Offense in the Colleges in 1939

(Continued from page 18)

tail-back 4 and then drives inside the defensive left guard. The defensive left guard is trapped by the left offensive guard 6.

Diagram 29 features a fake buck ending up with a forward pass. The fullback receives the ball from the center and then drives forward and gives it to the 2 back. The 2 back then laterals back to the tail-back 4 who runs to his right and throws a forward pass to the offensive left end 5 or to the 2 back who runs out to the weak-side flat.

Diagram 30 features a quick forward pass to the left offensive end 5. When the defensive halfback comes up fast to cover him, he should break deep for the pass. A number of touchdowns have been scored on this play in the Southern Conference.

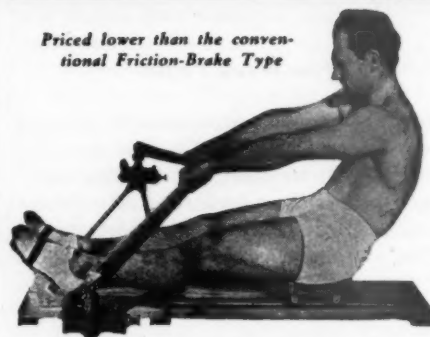
The South-West

Although the teams of the South-West have in their repertoire many good spinners, reverses, double reverses, fake reverses, fullback smashes, et cetera, we have selected only pass plays to give our readers an idea of the pass plays that are being used in the far-famed passing South-West.

Diagram 31 shows a pass play from an unbalanced line. Five runs straight down field to a position just behind the weak-side line-backer, then cuts at a 90-degree

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angle to his right; 6 pulls out and traps the defensive right tackle; the center, 8 and 9 block the guards; 10 blocks the defensive left tackle; 11 drives down inside the defensive left halfback; 2 drops back to protect the passer from the defensive left end. The ball is snapped to 3 who spins and fakes to 1. Three continues to fade back and shoots a pass to either 5 or 4 who has come across into the flat. One continues on around and blocks the right end.

Diagram 32 shows a pass play to the right end. Five drives down field to the safety's left; 6 blocks the defensive right guard; 7 pulls out and traps the defensive right tackle; 9 pulls out and traps the defensive left tackle; 10 blocks the left guard; 11 drives down field, inside the defensive left halfback. One runs to the right to draw the defensive left halfback out; 3 blocks the defensive right end; 2 blocks the defensive left end. The ball is snapped to 4 who runs to the right and shoots a pass to 11.

Diagram 33 shows a lateral. Five goes down field and angles for the safety. Six pulls out and blocks the defensive right tackle; the center blocks the right guard; 8 pulls out and protects against the defensive right end; 9 blocks the defensive left guard; 10 blocks the left tackle; 1 blocks the defensive left end. The ball is snapped to 3 who gives it to 2. Two half spins and laterals to 4 who fades to his right and passes to 5, 3, 11 or 2.

Diagram 34 is a pass play to one of three possible receivers. Five drives straight down and cuts at right angles to a position behind the defensive left line-backer. Six and 7 block the defensive right tackle and guard; 9 pulls out and blocks the defensive left tackle; 10 blocks the defensive left guard; 2 blocks the left end. The ball is snapped to 4 who spins and fakes to 3. Four fades back and shoots a pass to 5, 11 or 1.

A pass with the ends in and the backs down is shown in Diagram 35. Five and 11 go down and cut in. Backs 1 and 2 run to the outside, then cut down outside the halfbacks. The blocking assignments are shown in the diagram. The ball is snapped to 4 who fades and shoots a pass to one of the four receivers.

Diagram 36 shows a delayed pass play to back 2. Five drives to his left and cuts sharply toward the safety; 11 goes down back of the defensive left halfback. The blocking assignments are as diagrammed. The ball is snapped to 4 who fades to his right and shoots a pass to 2 who has delayed and cut through back of the defensive left line-backer.

In Diagram 37, five is shown going diagonally across to a position between safety and half. One drives down and out for the halfback; 11 goes for the safety; 2 drives to the flat zone. The line-blocking assignments are as shown. The ball is snapped to 4 who fades and passes to 5.

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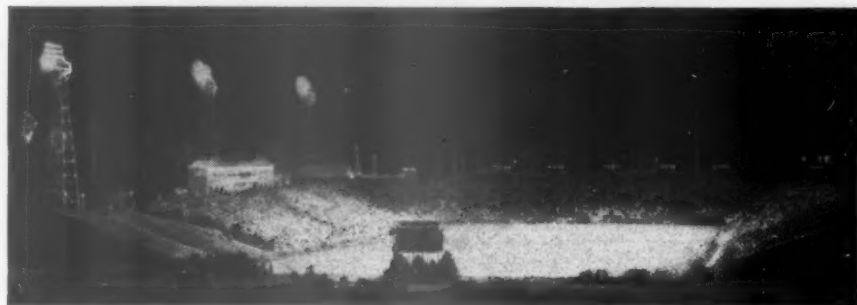
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